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ABSTRACT

This report series defines and measures the "information activity" within the national economy. "Information activity" is defined to include those specific industries and occupations whose primary function is to produce, process, or transmit economically valuable information. Changes in the national labor force are analyzed over a 120-year span. This volume consists of a number of tables, including those that show trends in the labor force over time and National Income Accounts information. This is backup material to Chapters 4 and 9 of Volume I (IR 005 061). (Author/DAG)

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THE INFORMATION ECONOMY: National Income, Workforce, and Input-Output Accounts

Dr. Marc Uri Porat,
with the assistance of
Michael Rogers Rubin

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Any opinions, findings, conclusions, or recommendations expressed in this document are those of the author and do not necessarily reflect the views of the National Science Foundation or the Department of Commerce of the U.S. Government.

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U.S. DEPARTMENT OF COMMERCE
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Assistant Secretary for Science and Technology

OFFICE OF TELECOMMUNICATIONS
John M. Richardson, Director

May 1977

UNITED STATES DEPARTMENT OF COMMERCE
OFFICE OF TELECOMMUNICATIONS
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In carrying out this mission, the Office

- Conducts research needed in the evaluation and development of policy as required by the Department of Commerce
- Assists other government agencies in the use of telecommunications
- Conducts research, engineering, and analysis in the general field of telecommunication science to meet government needs
- Acquires, analyzes, synthesizes, and disseminates information for the efficient use of the nation's telecommunication resources.
- Performs analysis, engineering, and related administrative functions responsive to the needs of the Director of the Office of Telecommunications Policy, Executive Office of the President, in the performance of his responsibilities for the management of the radio spectrum
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FOREWORD

Physics, a discipline at the heart of our last major technological revolution, yields a quotation that is highly appropriate to the present work:

> When you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind: it may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced to the stage of science.
>
> -- William Thomson, Lord Kelvin (1824-1907) English Physicist

Notions of yet another major revolution, one that will bring about a "post-industrial" society, have been in the air for some time now. Yet, few steps toward the measurement of this revolution's most important element -- information activities -- were taken until Dr. Porat began the investigation that is reported in these volumes. We might say, then, that this study, truly a seminal one, pushes our knowledge of an information economy closer to "the stage of science."

This report proposes a conceptual framework for defining the information activities of an advanced economy, and prescribes an objective way to quantify them. Without such definition and measurement, I cannot imagine how we can formulate sound policy for an information society. The fact that so many information policy issues are pressing upon us adds to the pertinence of the research.

It may strike some as odd that the Office of Telecommunications, an organization concerned principally with telecommunications technology, would offer a report dealing with the whole range of information activities. The explanation lies in the need to view telecommunications in the larger context of its effects on other aspects of society. Satellite networks, for example, can be an instrument for regional economic development. Retail terminals can perform banking functions. And electronic communications is steadily diminishing the volume of traditional postal delivery. Thus, it is essential to appreciate how issues internal to telecommunications influence other kinds of information activities. Conversely, ways of achieving broader policy objectives might well produce decisions affecting telecommunications services. I have in mind such goals as the provision of equal access to high-quality health care or the expansion of continuing education, both of which obviously can be facilitated by the electronic media. To the extent that telecommunications and its sister technology, computers, are at the core of the infrastructure of the information society, their relationships with the larger society are every bit as important as their internal problems.

The concepts and methods described in these volumes have begun to attract wide national and international notice. They are cited by officials of the Congress, the Executive Branch, and the regulatory agencies. They are being studied by international organizations. Yet, in spite of all the acknowledgments, this study constitutes only a point of departure toward a more complete understanding of the information society. We must devise and test alternative representations of the information economy against this one. We still have to settle on the best model, achieve comparability among models in other countries, produce trend data, and construct the methods for predicting consequences of alternative policy decisions.

I am confident that this additional work will be taken up by others. Moreover, I believe that their efforts will sharpen these concepts into a new tool, a tool of great value because of its clear relevance to the course of our world's complex societies.

John M. Richardson
Director

INTRODUCTORY NOTE

Science, commerce and technology are inextricably interconnected in American society. It is therefore fitting that this effort to clarify one aspect of their impact was a joint project of the National Science Foundation and the Department of Commerce. The National Science Foundation provided the funds needed to undertake the project, the Department of Commerce the institutional setting in which to conduct it. The bond was cemented through a common concern with telecommunications technologies and policies.

We were particularly motivated by the prospect of increasing the substance surrounding fascinating concepts about the changing nature of American society. The evident acceleration in invention and application of information technologies and the social and economic change which accompanies this development, is directly relevant to a wide range of policy concerns.

The findings of this research are provocative and concise. We trust that they will stimulate and illuminate public discussion. The report describes some of the ways in which the findings have been applied thus far. Yet it is clear that this work is an incremental contribution and that much remains to be accomplished. Work has begun in the U.S. and abroad to extend the data base developed in the project. I extend an invitation to readers to contribute their reactions to the report and their ideas on further research.

Charles N. Brownstein
Program Manager
Telecommunications Policy
Research Program
National Science Foundation, 1977.

SYNOPSIS

THE INFORMATION ECONOMY Report Series totals nine volumes, each of which has its own subtitle.

77-12(1) -- THE INFORMATION ECONOMY: Definition and Measurement -- Dr. Marc Uri Porat -- 265 pp.

This volume contains the executive summary and the major findings of the study. It defines information activity and includes a formal set of National Income and Product Accounts for the primary and secondary information sectors, with input-output matrices for both of these sectors. In addition, it specifies the information-related occupations of both the primary and secondary information sectors; this includes a consideration of private and public bureaucracies. Finally, it presents lists of information policy issues pertaining to industry, government, and the home and makes two recommendations as to how the Federal government might meet the public policy issues posed by the expansion of our information activity.

77-12(2) -- THE INFORMATION ECONOMY: Sources and Methods for Measuring the Primary Information Sector (Detailed Industry Reports) -- Dr. Marc Uri Porat -- 188 pp.

This volume presents reports of the 25 major industries that compose the primary information sector. The volume's classification scheme is based on the Bureau of Economic Analysis Input-Output Matrix. Each industry is discussed in great detail. The discussions include the reasoning behind considering the industry as part of the primary information sector, a breakdown of the subordinate industries that compose the larger industrial category, a narrative of the informational aspects of the industry, and a report of the final demand and value-added components. The service, manufacturing, and construction sectors of the economy are considered.

* * * * * *

We call to the reader's attention that the most critical part of the entire report series is to be found in the first two volumes. The remaining volumes are essentially supplements to and extensions of Volumes 1 and 2.

77-12(3) -- THE INFORMATION ECONOMY: The Interindustry Transactions Matrices (1967) -- Dr. Marc Uri Porat, with the assistance of Michael R. Rubin -- 58 pp.

Volume 3 consists of input-output tables showing transactions in the 1967 economy. One table shows a breakout of 108 industries, another of 190 industries.

77-12(4) -- THE INFORMATION ECONOMY: The Technology Matrices (1967) -- Dr. Marc Uri Porat, with the assistance of Michael R. Rubin -- 117 pp.

Volume 4 includes A-coefficient matrices for the 1967 economy at both the 108 and 190 levels of detail.

77-12(5) -- THE INFORMATION ECONOMY: The "Total Effect" Matrices (1967) -- Dr. Marc Uri Porat, with the assistance of Michael R. Rubin -- 117 pp.

This volume contains the 1967 Inverse Matrices with detail at both the 108 and 190 industry levels.

Volumes 3 through 5 contain backup information to Chapters 6 and 10 of Volume 1.

77-12(6) -- THE INFORMATION ECONOMY: The Labor Income by Industry Matrix of Employee Compensation (1967) -- Dr. Marc Uri Porat, with the assistance of Michael R. Rubin -- 100 pp.

Volume 6 consists of a table of 422 occupations and 108 industries showing the wages paid by each industry to each occupation in 1967.

77-12(7) -- THE INFORMATION ECONOMY: The Labor Income by Industry Matrix of Employee Compensation (1970) -- Dr. Marc Uri Porat, with the assistance of Michael R. Rubin -- 91 pp.

Volume 7 consists of a table of 422 occupations and 108 industries showing the wages paid by each industry to each occupation in 1970.

Volumes 6 and 7 contain backup information to Chapter 7 of Volume 1.

77-12(8) -- THE INFORMATION ECONOMY: National Income, Workforce, and Input-Output Accounts -- Dr. Marc Uri Porat, with the assistance of Michael R. Rubin -- 91 pp.

This volume contains backup material to Chapters 4 and 9 of Volume 1. It consists of a number of tables, including those that show trends in the labor force over time and National Income Accounts information.

77-12(9) -- THE INFORMATION ECONOMY: User's Guide to the Complete Database -- Michael R. Rubin -- 71 pp.

This volume is a user's guide to the computer model which describes the information elements of the economy in the benchmark year 1967. The database is available on magnetic tape through the National Technical Information Service, Springfield, Virginia, Accession No. PB-264 172, titled "The Information Economy."

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A dissertation entitled The Information Economy is available from: University Microfilms, 300 N. Zeeb Road, Ann Arbor, Michigan 48106 (Attn: Dissertation copies), Accession No. 77-7147.

To Fritz Machlup and Daniel Bell I owe a deep intellectual debt for plowing the field so thoroughly and proficiently before me. After their contribution, mine was simply to harvest the crop that they had planted; and there is ample left for future researchers who wish to embark on this new line of research.

My early ideas, ill formed and overly ambitious, were skillfully and gently molded by the able hands of Professors Edwin Parker and James Rosse. They had the good sense to say both yes and no at just the right moments, and were always accessible when I needed guidance. The last and most critical year of this work was made possible through the good graces of Dr. John Richardson, Director of the Office of Telecommunications, who gave freely of his encouragement and support, and who smoothed the bureaucratic wrinkles when they seemed to mount like tidal waves. He understood the policy implications of this work before most.

Generous financial support from the National Science Foundation was the lifeblood for this project. Dr. Charles Brownstein (RANN/Division of Advanced Productivity Research and Technology) managed the project most professionally, and his advice and consent were very helpful and greatly appreciated.

Over the course of the project, I drew heavily on the talents and energies of many people, and to them I extend a special gratitude. Michael Rubin, who joined me nearly three years ago, single handedly slew the computer dragon. His all night sessions outnumbered mine by two to one, and resulted in Chapters 6, 7, & 10. Joseph Kashi assembled most of the government and labor data of Chapters 7 and 8. Deborah Semb and Barbara Mikelson delivered the National Income and Product Accounts and time series of Chapters 4 and 5.

From the thousand and one production nightmares, I was rescued by the skill and perseverance of Fran Sills. She administered endless drafts of tables and text with dispatch and poise, working many evenings and weekends at top efficiency. Her performance in this project was superb. Glynetta Perrymore endured the dark ages of word processing through five complete drafts of the text. Edith Uunila thoroughly and competently helped with the final stages of proofreading and editing.

Along the road, many kind people lent me a helping hand. At the Bureau of Economic Analysis, I was given free reign by Philip Ritz, Chief of the Interindustry Division. Carolyn Knapp and Elizabeth Spaulding helped with the more obscure procedures used in the national accounts. Howard Schreier helped with programming the final demand and value added tables.

At the Bureau of Labor Statistics, I extend my thanks to Charles Bowman and the input-output staff of the Economic Growth Project. The early labor data were provided by John Shew and Karen Hassmer, and their help is acknowledged.

Although I gratefully share the credit with my friends and colleagues, I relieve them of any responsibility for remaining errors.

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APPENDICES FOUR AND NINE

These appendices contain the following backup material to Chapters 4 and 9 of Volume I:

(i) A detailed final demand table underlying the accounts shown in Chapter 4 (Table 1).

(ii) A detailed value-added table, also underlying the accounts shown in Chapter 4 (Table 2).

The first two tables are presented in a way that enables other researchers to apply different definitions of the information sector, and to trace the impact on the accounts.[1]

(iii) An elaboration of net exports originating in the primary information industries.

(iv) A detailed final demand table underlying the accounts shown in Chapter 9.

(v) A detailed value-added table, also underlying the accounts shown in Chapter 9.

(vi) Additional data on the secondary national income time series.

APPENDIX FOUR

Final Demand and Value Added

The final demand and value added tables are taken from the 1967 Input-Output study at the 484 order level conducted by the Bureau of Economic Analysis.

Elaboration of Net Exports

The consolidated accounts stand as summaries of the major final demand and gross product originating sectors. However, some further elaboration might be useful for net exports.

Trade in information goods and services accounted for a $3 billion surplus in 1967 -- some 59.6% of the total $5 billion trade surplus in 1967. Information as a whole was not a large gross item in the U.S. trade picture, but it was clearly a major net exporter. Table 3 shows an overview of trade in information goods and services.

TABLE 1: COMPONENTS OF FINAL DEMAND AT THE 6-DIGIT INPUT-OUTPUT LEVEL, 1967

($ Millions, 1967)

	PERSONAL CONSUMPTION EXPENDITURES	GROSS CAPITAL FORMATION	NET INVENTORY CHANGE	NET EXPORTS	FEDERAL PURCHASES OF GOODS & SVCS	STATE & LOCAL PURCHASES OF GOODS & SVCS	TOTAL INFORMATION FINAL DEMAND
Total Primary Information Ind	83,752.0	19,957.8	1,625.4	2,942.6	26,795.6	39,512.2	174,585.6
Total Private Sector	82,666.8	19,957.8	1,625.4	2,944.3	16,242.4	12,356.2	135,842.9
Total Public Sector	1,085.2	0	0	- 1.7	10,503.2	27,156.0	38,742.7
CONSTRUCTION	0	5,430.9	0	2.2	407.5	7,410.3	13,250.9
New office buildings	0	2,805.9	0	2.2	199.0	743.0	3,750.1
New education buildings	0	987.0	0	0	22.0	5,430.0	6,439.0
New tel & tel	0	1,638.0	0	0	0	0	1,638.0
R&M office buildings	0	0	0	0	186.5	1,237.3	1,423.8
R&M tel & tel	0	0	0	0	0	0	0
INFORMATION GOODS	9,266.6	10,086.5	1,559.6	1,102.2	8,216.6	1,770.1	32,001.6
Wood office furniture	0	122.3	2.8		8.2	26.1	
Metal office furniture	0	444.8	8.5	- 6.6	30.9	95.0	977.8
Public building furniture	0	61.4	15.0		7.1	162.3	
Paper mill products	16.4	0	73.5	-454.3	18.0	51.7	-294.7
Envelopes	8.8	0	30.3	.1	12.4	33.3	84.9
Coated & glazed paper	25.1	0	2.9	2.9	4.7	0	35.6
Newspapers	1,443.6	0	1.6	1.3	1.4	4.4	1,452.3
Periodicals	750.1	0	7.0	66.0	1.0	26.0	850.1
Book publishing	1,137.6	0	127.0	137.0	3.9	627.1	2,032.6
Book printing	0	0	- 2.6	0	26.6	15.6	39.6
Misc publishing	127.4	0	- 0.6	4.9	.6	1.9	134.2
Commercial printing	0	0	101.7	14.6	173.2	118.3	407.8
Manifold business forms	0	0	2.8	0	0	0	2.8
Blankbooks & binders	80.2	0	19.7	1.8	0	0	101.7
Greeting cards	384.7	0	35.6	1.9	0	0	422.2
Engraving & plate printing	31.8	0	.6		-33.8	2.4	
Bookbinding & related work	0	0	2.7		0	50.0	
Typesetting	0	0	.4	1.8	0	0	56.8
Photoengraving	0	0	1.1		0	0	
Electrotyping & stereotyping	0	0	- .2		0	0	
Paper industry machines	0	124.5	- .3	8.5	.1	0	132.8
Printing trades machines	0	488.0	35.0	70.1	16.9	5.9	615.9
Electronic computing equipment	0	2,342.4	102.1	343.7	360.2	7.3	3,155.7
Calculating & accounting mach	0	465.1	8.6	97.3	55.0	47.8	673.8
Typewriters	96.8	232.6	16.7	32.0	42.7	63.7	484.0
Scales and balances	15.8	87.6	2.5	11.0	7.8	4.8	129.5
Office machines, nec	0	224.4	25.6	57.4	67.4	36.5	411.3
Electric measuring instruments	0	629.0	19.8	122.3	226.4	13.0	1,010.5
Radio and TV receiving sets	3,379.2	114.5	84.4	-431.1	82.1	23.6	3,252.7

TABLE 1: COMPONENTS OF FINAL DEMAND AT THE 6-DIGIT INPUT-OUTPUT LEVEL, 1967 - (Cont'd)

	PERSONAL CONSUMPTION EXPENDITURES	GROSS CAPITAL FORMATION	NET INVENTORY CHANGE	NET EXPORTS	FEDERAL PURCHASES OF GOODS & SVCS	STATE & LOCAL PURCHASES OF GOODS & SVCS	TOTAL INFORMATION FINAL DEMAND
Phonograph records	214.3	0	20.7	11.1	2.8	8.3	257.2
Tel & tel equipment	0	1,455.6	78.0	16.6	204.8	.2	1,755.2
Radio & TV comm. equipment	52.4	1,366.7	417.0	306.5	5,312.7	86.9	7,542.2
Electron tubes	50.4	0	- 14.1	- 17.3	210.7	2.9	232.6
Semiconductors	0	0	42.4	97.9	44.6	0	184.9
Electronic components, nec	120.3	18.3	110.8	83.2	384.4	10.0	727.0
X-ray apparatus & tubes	0	133.3	7.2	9.4	11.2	13.9	175.0
Engineering & sci instruments	0	122.1	41.6	129.4	372.3	53.2	718.6
Mechanical measuring device	25.6	491.9	30.0	246.5	76.7	13.9	844.6
Auto temperature controls	0	0	2.1	25.2	6.2	0	33.5
Watches & clocks	389.8	.6	4.0	- 63.2	93.0	3.5	427.7
Optical instruments & lenses	37.5	226.6	7.4	- 34.5	58.9	15.3	311.2
Photographic equip & suppl	675.7	693.4	70.6	188.3	323.0	128.7	2,079.7
Pens & mech pencils	147.9	0	4.7		0	0	
Lead pencils & art goods	49.9	0	2.9		0	23.1	
Marking devices	0	0	2.3	19.2	0	0	257.2
Carbon paper & inked ribbon	5.8	0	1.4		0	0	
Signs & advertising displays	0	241.4	6.4	1.3	2.5	- 6.5	245.1
Office supplies	0	0	0	0	175.7	294.0	469.7
INFORMATION SERVICES	72,400.2	4,440.4	- 65.8	1,839.9	7,668.3	3,175.8	90,560.4
Communication, exc Radio, TV	7,836.8	1,095.7	0	7.1	543.5	464.1	9,947.2
Radio & TV broadcasting	0	0	0	- .5	0	7.2	6.7
Banking	8,384.3	0	0	69.9	34.6	0	8,488.8
Credit agencies	2,350.0	0	0	0	- 5.8	0	2,344.2
Security & commodity broker	2,149.1	0	0	0	0	107.9	2,257.0
Insurance carriers	11,675.6	0	0	- 80.8	16.9	261.7	11,873.4
Insurance agents & brokers	0	0	0	0	0	0	0
Real estate commissions	321.7	2,100.0	0	179.5	229.3	485.8	3,316.3
Pers repair services	1,413.7	0	0	0	0	0	1,413.7
Misc business services	712.9	0	0	94.7	1,283.4	891.4	2,982.4
Advertising	141.6	0	0	31.7	1.4	30.0	204.7
Misc professional services	3,342.1	0	0	298.3	590.2	330.8	4,561.4
Motion pictures	1,128.2	0	- 56.8	256.4	87.1	31.5	1,446.4
Amusement & recreation	272.4	0	0	0	0	0	272.4
Doctors & dentists	6,543.6	0	0	0	33.5	252.6	6,829.7
Other medic & health services	34.1	0	0	0	0	0	34.1
Educational services	6,458.9	0	0	0	1,358.9	139.3	7,957.1
Nonprofit organizations	7,053.1	0	0	0	640.1	50.9	7,744.1
Royalties unaffiliated	0	0	0	293.4	0	0	293.4
Net R&D	0	0	0	0	2,609.9	0	2,609.9
Wholesale trade	6,376.9	981.1	122.6	690.2	245.3	122.6	16,007.5
Retail trade	7,205.2	263.6	0		0	0	
GOVERNMENTS	1,085.2	0	0	-1.7	10,503.2	27,156.0	38,742.7
Primary wages Federal government	0	0	0	0	10,231.9	0	10,231.9
Education wages State and local	0	0	0	0	0	26,928.0	26,928.0
Postal service	1,085.2	0	0	-1.7	271.3	228.0	1,582.8

TABLE 2: COMPONENTS OF VALUE ADDED AT THE 6-DIGIT INPUT-OUTPUT LEVEL, 1967

($ Millions, 1967)

	EMPLOYEE COMPENSATION	NET INTEREST	CAPITAL CONSUMPTION ALLOWANCES	INDIRECT BUSINESS TAXES	PROFIT-TYPE INCOME	TOTAL INFORMATION VALUE ADDED
Total Primary Information Industries	136,488	3,031	12,151	11,555	42,862	200,025
Total Private Sector	94,895	3,031	12,151	11,503	43,808	159,326
Total Public Sector	41,593	0	0	52	- 946	40,699
CONSTRUCTION	6,972.4	28.8	225.1	99.6	1,200.6	8,527.0
New office buildings						
New education buildings	3,824.6	28.8	225.1	73.6	702.9	4,855.0
New tel & tel						
R&M office buildings	3,147.8	0	0	26.0	497.7	3,671.2
R&M tel & tel						
INFORMATION GOODS	24,449.0	268.0	1,942.0	410.0	5,622.0	32,691.0
Wood office furniture	45.4	.3	2.3	.7	25.1	73.8
Metal office furniture	249.4	1.6	16.6	6.6	53.1	327.3
Public building furniture	108.5	.6	4.5	2.2	10.7	126.5
Paper mill products	854.6	32.3	226.2	34.0	11.1	1,158.2
Envelopes	188.3	1.3	9.8	3.5	6.0	208.9
Coated & glazed paper	103.2	1.1	10.6	3.8	52.9	171.6
Newspapers	2,288.7	3.3	183.6	27.3	707.6	3,210.5
Periodicals	933.9	1.2	57.1	17.9	140.9	1,151.0
Book publishing	448.2	3.6	24.2	8.3	308.1	792.4
Book printing	315.6	1.2	29.3	4.2	38.6	388.9
Misc publishing	255.7	1.4	8.9	13.2	72.0	351.2
Commercial printing	1,972.0	4.6	161.6	31.2	304.3	2,473.7
Manifold business forms	417.2	1.2	35.0	9.3	50.9	512.6
Blankbooks & binders	199.7	.4	10.7	3.8	15.1	229.7
Greeting cards	198.5	.7	10.9	15.5	71.2	296.8
Engraving & plate printing	71.9	.2	4.2	.8	7.4	84.5
Bookbinding & related work	193.4	.4	7.8	1.5	3.7	206.8
Typesetting	245.6	.5	12.0	1.7	39.6	299.4
Photoengraving	148.9	.3	6.3	1.0	25.3	181.8
Electrotyping & stereotyping	36.9	.1	6.6	.3	5.3	44.2
Paper industry machines	48.9	.5	5.0	1.1	5.8	61.3
Printing trades machines	275.1	3.0	24.4	5.0	79.5	387.0
Electronic computing equipment	731.4	19.4	65.5	16.1	743.6	1,576.0
Calculating & accounting mach	261.0	5.2	27.8	4.5	110.1	408.6
Typewriters	278.7	4.6	26.4	3.2	84.9	397.8
Scales and balances	50.0	.9	3.8	.4	23.4	78.5
Office machines, nec	240.8	3.4	23.2	3.6	18.1	289.1
Electric measuring instruments	502.0	23.4	30.5	8.0	104.7	668.6
Radio & receiving sets	937.1	28.3	50.1	16.9	183.4	1,215.8

TABLE 2: COMPONENTS OF VALUE ADDED AT THE 6-DIGIT INPUT-OUTPUT LEVEL, 1967 - (Cont'd)

	EMPLOYEE COMPENSATION	NET INTEREST	CAPITAL CONSUMPTION ALLOWANCES	INDIRECT BUSINESS TAXES	PROFIT-TYPE INCOME	TOTAL INFORMATION VALUE ADDED
Phonograph records	45.8	3.7	8.9	2.5	48.3	109.2
Tel & tel equipment	1,074.9	5.6	115.3	18.4	280.6	1,494.8
Radio & TV comm. equipment	4,450.3	20.1	175.9	47.6	298.0	4,991.9
Electron tubes	391.4	12.3	49.4	8.7	323.7	785.5
Semiconductors	540.2	10.9	54.0	8.5	63.8	677.4
Electronic components, nec	1,776.0	34.7	140.5	25.8	222.9	2,179.9
X-ray apparatus & tubes	123.2	1.1	3.4	1.2	-17.8	111.1
Engineering & sci instruments	490.2	7.0	29.0	6.3	-53.4	479.1
Mechanical measuring device	702.6	11.0	48.8	10.4	-41.4	731.4
Auto temperature controls	329.1	4.7	22.5	4.1	-18.5	341.9
Watches & clocks	113.2	5.3	16.0	3.3	54.2	192.0
Optical instruments & lenses	173.1	.5	14.1	1.9	31.9	221.5
Photographic equip & suppl	1,001.5	2.5	175.7	18.9	1,033.4	2,232.0
Pens & mech pencils	82.6	.6	4.9	1.5	23.2	112.8
Lead pencils & art goods	55.6	.3	3.1	.9	3.3	63.2
Marking devices	70.9	.4	3.2	1.1	9.9	85.5
Carbon paper & inked ribbon	60.9	.4	3.1	1.0	6.7	72.1
Signs & advertising displays	366.9	2.3	13.9	3.9	50.6	437.6
Office supplies	0	0	0	0	0	0
INFORMATION SERVICES	83,474.0	-3,328.0	9,984.0	10,993.0	36,985.0	118,108.0
Communication, exc Radio, TV	6,641.0	645.0	2,279.0	2,330.0	4,134.0	16,029.0
Radio & TV broadcasting	1,062.0	46.0	183.0	31.0	257.9	1,579.9
Banking	5,875.0	-1,268.0	589.0	373.6	6,160.9	11,730.5
Credit agencies	2,581.0	-5,565.2	359.1	73.2	1,762.2	- 789.7
Security & commodity broker	1,540.6	- 146.3	31.3	340.9	1,012.9	2,779.4
Insurance carriers	7,237.8	- 872.8	329.0	1,108.6	1,023.6	8,826.2
Insurance agents & brokers	1,729.0	- 48.0	115.0	21.4	1,667.1	3,484.5
Real estate	1,233.8	3,581.0	3,298.0	3,104.0	4,177.2	15,394.0
Pers repair services	512.4	3.2	86.0	20.0	231.5	853.1
Misc business services	6,260.2	55.1	936.5	85.8	1,771.4	9,109.0
Advertising	1,142.6	10.0	85.8	22.2	333.1	1,593.7
Misc professional services	5,161.7	0	345.0	152.0	6,524.4	12,183.1
Motion pictures	1,038.0	31.0	201.8	121.0	133.0	1,524.8
Amusement & recreation	285.1	11.4	55.9	94.2	37.9	484.5
Doctors & dentists	996.3	33.4	158.2	59.3	4,227.5	5,474.7
Other medic & health services	162.4	2.1	9.3	2.7	103.2	279.7
Educational services	4,902.0	11.0	42.0	20.0	195.0	5,170.0
Nonprofit organizations	6,348.3	0	0	0	0	6,348.3
Wholesale trade	4,533.4	78.8	469.3	1,979.5	1,523.4	8,584.3
Retail trade	4,232.0	64.1	411.1	1,053.0	1,708.6	7,468.8
GOVERNMENTS	41,593.3	0	0	51.6	-946.0	40,699.0
Primary wages Federal government	10,231.9	0	0	0	0	10,231.9
Education wages State and local	26,928.0	0	0	0	0	26,928.0
Postal service	4,433.4	0	0	51.6	-946.0	3,539.0

TABLE 3: OVERVIEW OF TRADE IN INFORMATION GOODS AND SERVICES

($ Millions, 1967)

	EXPORTS	IMPORTS	NET BALANCE
Information Goods	3,134	2,031	1,103
Information Services	1,913	369	1,544
Royalties & Management Fees	398	104	294
Total	5,445	2,504	2,941

The largest net exporter, shown in Table 4, was the electronic computer industry, followed closely by the radio and television equipment industry. Note, however, that radio and TV sets (as distinct from broadcasting equipment) were among the heaviest net importers in the primary information sector.

TABLE 4: INFORMATION TRADE BALANCES BY INDUSTRY (OVERVIEW)

($ Millions, 1967)

SELECTED INDUSTRIES	NET BALANCE
Electronic computers	343.7
Radio & television equipment	306.5
Legal and accounting services	298.3
Motion pictures	256.4
Mechanical measuring instruments	246.5
Photographic equipment & supplies	188.3
Book publishing	137.0
Engineering & scientific equipment	129.4
Calculating & accounting machines	97.3
Semiconductors	97.9
Banking services	69.9
Watches & clocks	- 63.2
Insurance carriers (fees on shipping)	- 80.8
Radio & TV sets	-431.1
Paper mill products	-804.0

Source: BEA Worktape and data courtesy of Mr. Magnon, foreign trade analyst.

The exportation of "culture," as represented by the motion picture and book publishing industries, were large single items ($393 million together), but quite small relative to total exports.

Table 5 shows a detailed breakdown of imports and exports in the information sector. This information is a summary of the detailed (6-digit) industries discussed in Appendix 3 (Vol. 2).

TABLE 5: NET EXPORTS OF INFORMATION GOODS AND SERVICES (DETAIL)

(Millions, 1967)

	EXPORTS	IMPORTS	NET TRADE BALANCE
Total Trade Balance	5444.5	2503.7	2940.8
Goods	$3133.7	2031.1	1102.6
Office bldgs & structures	15.1	12.9	2.2
Office furniture	11.1	17.7	-6.6
Paper mill products	71.4	525.7	-454.3
Envelopes	.4	.3	.1
Paper	9.8	6.9	2.9
Newspapers	3.1	1.8	1.3
Periodicals	66.0	---	66.0
Book publishing	137.8	.8	137.0
Misc Publishing	4.9	---	4.9
Commercial printing	27.1	12.5	14.6
Business forms, binders	2.5	2.5	.0
Greeting cards	1.9	---	1.9
Printing trades service	2.6	.8	1.8
Paper ind. machinery	20.7	12.2	8.5
Automatic temp controls	25.2	---	25.2
Printing trades machinery	93.1	23.0	70.1
Electronic computing equipment	478.2	134.5	343.7
Calculating & accounting mach	113.2	15.9	97.3
Typewriters	32.9	.9	32.0
Scales & balances	13.2	2.2	11.0
Office machines, nec	72.2	14.8	57.4
Electric measuring instruments	166.2	43.9	122.3
Radio & TV receiving sets	87.1	518.2	-431.1
Phonograph records	11.1	---	11.1
Telephone & telegraph apparatus	47.4	30.8	16.6
Radio & TV communication equip	434.6	128.1	306.5
Electron tubes	62.2	79.5	-17.3
Semiconductors	151.8	53.9	97.9
Electronic components, nec	158.0	74.8	83.2
X-ray apparatus	29.2	19.8	9.4
Engr & scientific instruments	162.1	32.7	129.4
Mech measuring devices	263.4	16.9	246.5
Watches & clocks	10.2	73.4	-63.2
Optical ins and lenses	30.4	64.9	-34.5
Photographic equip & supplies	282.9	94.6	188.3
Pens & mechanical pencils	32.9	13.7	19.2
Signs & advertising displays	1.8	.5	1.3
Services	2310.8	472.6	1838.2
Telecommunications	139.6	132.5	7.1
Radio & TV broadcasting	.0	.5	-.5
Banking	69.9	---	69.9
Insurance carriers	20.5	101.3	-80.9
Real estate	179.5	---	179.5
Misc business service	94.7	---	94.7
Advertising	31.7	---	31.7
Misc professional service	304.2	5.9	298.3
Motion pictures	320.6	64.2	256.4
Royalties unaffiliated	397.6	104.2	293.4
Post Office revenue	16.7	18.4	-1.7
W&R trade margins	735.8	45.6	690.2

Source: BEA I-O worktape and BEA foreign trade analyst.

Royalties and Management Fees

One of the most interesting export items is the direct sale of "intellectual property": pure information in the form of copyrights, patent or process rights, formulas, designs, trademarks, franchises and manufacturing rights. In some cases, "show how" is sold indirectly in the form of management fees; in other cases it is embodied in a process or a technique. Management fees are usually collected by the home company from its subsidiaries or affiliates. In return for the fee, a foreign subsidiary may receive only the right to use a process; or it may enjoy extensive technical, managerial, and marketing assistance. Most forms of royalty payments represent technology transfer in some degree. A review on the subject by Teplin[2] points out that the export statistics understate royalty exports in two respects. First, firms do not always enter formal licensing arrangements with their foreign subsidiaries; hence, no transactions are recorded in the accounts. Second, the price of "technology transfer" type items is subject to wide variation in how it is determined. Some firms may choose to set low royalty payments, but retain high levels of profits in the subsidiary if the foreign country's tax rate is lower than the domestic rate. Other firms may set very low prices for their patents in exchange for an arrangement whereby the receiving firm agrees not to compete with the U.S. firm in the domestic market.[3] In cross-licensing arrangements, firms may prefer to barter their knowledge rather than set a price for the process.

Table 6 shows a time series on all transactions involving copyrights, film rentals, and management fees. The time series is only partially complete (1956-1973) due to lack of consistent primary data. The U.S. net trade balance in pure information exports has steadily increased from $510 million in 1956 to over $3 billion by 1974. The majority of the exports were between U.S. firms and their affiliates (foreign direct investment). Film and television rentals played a relatively minor role as an export item, and no role at all as an import item.

Friedlin and Lupo gathered data on royalty and management fee exports broken down by region.[4] In particular, they produced detailed estimates of developed countries' (DC) and less-developed countries' (LDC) purchases of intellectual property, royalties, and management fees.

TABLE 6: INTERNATIONAL TRADE IN INTELLECTUAL PROPERTY

($ Millions, 1967)

YEAR	FILM ROYALTIES[a] & RENTALS NET BALANCE	FOREIGN DIRECT INVESTMENT-RELATED[b] TRANSACTIONS EXPORTS (RECEIPTS)	FOREIGN DIRECT INVESTMENT-RELATED[b] TRANSACTIONS IMPORTS (PAYMENTS)	TRANSACTIONS WITH UNAFFILIATED FOREIGN RESIDENTS[c] EXPORTS (RECEIPTS)	TRANSACTIONS WITH UNAFFILIATED FOREIGN RESIDENTS[c] IMPORTS (PAYMENTS)	NET TRADE BALANCE
1946		64	10			
1947		77	11			
1948		83	11			
1949		100	10			
1950	120	126	10			
1951	142	130	20			
1952	162	130	24			
1953	177	128	22			
1954	192	136	23			
1955	215	158	31			
1956	209	229	38	133	23	510
1957	208	238	36	140	22	528
1958	197	245	34	168	25	551
1959	194	349	32	166	28	649
1960	187	403	35	247	40	762
1961	199	463	43	244	46	817
1962	220	580	57	256	44	955
1963	229	660	61	273	51	1050
1964	257	756	67	301	60	1187
1965	275	924	68	335	67	1399
1966	299	972	64	353	76	1484
1967	301	1123	62	393	104	1651
1968	300	1245	80	437	106	1796
1969	288	1356	101	486	120	1909
1970	299	1561	111	573	114	2208
1971	296	1757	118	618	123	2430
1972[d]	339	1911	155	655	139	2611
1973[d]	324	2309	209	725	176	2973
1974[d]		2785	219	781	180	

[a]Updates for 1973 and 1974 courtesy of the Bureau of Economic Analysis memo, June 1975.

[b]Shows transactions between U.S.-based firms and their foreign affiliates or subsidiaries.

[c]Shows transactions between U.S. firms and foreign-based firms.

[d]Courtesy of Bureau of Economic Analysis, balance of payments analyst.

Source: M. Teplin, "U.S. International Transactions in Royalties and Fees: Their Relationship to the Transfer of Technology", Survey of Current Business, December 1973, Vol. 53, #12

Table 7 summarizes the data in a way that allows direct comparison of the LDC's and DC's. Only 1973 is shown in detail, since the time-series breakdowns generate more data than can be easily comprehended.

Developed countries (Canada, Europe, Australia, New Zealand, South Africa, Japan, Great Britain) purchased 77% of all royalty and management fees. Less developed countries (Latin America, Africa, Middle East, Asia, Pacific nations and others not specified) purchased only 23% of all U.S. "knowledge exports." Nearly 55% of all transactions involved royalty payments by DC's to the U.S., as compared to only 9% by the LDC's. Another 22% of all transactions were for management fees paid by DC's, compared to 14% by LDC's. The United States is clearly in the business of selling royalties to developed countries -- countries which already have the technocratic and intellectual support system to demand and successfully utilize information products. And the United States is clearly not in the business of selling pure information, such as know-how and show-how, to the LDC's. As we shall shortly discover, U.S. multinationals are apparently more interested in setting up direct affiliates and withdrawing branch earnings than in turning information over to LDC's. Whereas in the DC's the ratio of royalties to management fees is 2 1/2 to 1, the ratio in the LEC's is 1 1/2 to 1 in the opposite direction. The U.S. sellers of information products (royalties) do not turn over patented process information and techniques; rather, they hire out U.S. consultants and managers to "assist" LDC's in their domestic operation. This assistance, which is rewarded with management fees paid to U.S. owners of the foreign affiliate, results in the basic knowledge (i.e., a patent) remaining in the hands of the patent owner, not the host country.

Table 7 also shows us that the DC's overwhelmingly purchase royalties originating in U.S. manufacturing industries. Some 68% of all royalty payments are for manufacturing processes, techniques, patents, and franchises. A relatively small percentage of all "knowledge" imports if for cultural information transferred through film. The DC's spend four times as much for U.S. technological information than for film and TV rights. The "cultural imperialism" implied in massive intrusions of U.S. lifestyle, tasts, expectations and values into foreign countries is more prevalent in LDC's if a dollar measure is at all appropriate. The LDC's spent 28% of their total "knowledge" purchases on film and TV, compared to 16% for the DC's. However, in absolute dollars, the developed countries outspent the less developed countries by 3:1. This table says nothing about the effects of such knowledge imports, but it does suggest that technology transfer (in the form of process information) should not be ignored as a source of cultural exportation. The organization of a factory or a production system defines lifestyles and political arrangements much as a film tends to formulate images and values.

TABLE 7: BREAKDOWN OF ROYALTY AND MANAGEMENT FEE RECEIPTS BY REGION AND INDUSTRY: 1973

($ Millions, 1973)

AREA OF OPERATION & INDUSTRY MEMBERSHIP OF U.S. MULTINATIONAL RECEIVING PAYMENTS	ROYALTIES	PERCENT[a]	MANAGEMENT FEES	PERCENT	RECEIPTS AS % OF TOTAL ROYALTIES & FEES
DEVELOPED COUNTRIES					
Petroleum	6	0.4	123	19.3	5.9
Manufacturing	1054	67.6	326	51.9	63.2
Trade	173	11.1	31	4.8	9.3
Film	248	16.0	0	0	11.4
Other	76	4.9	147	23.5	10.2
Total	1557	100.0	627	100.0	100.0
LESS DEVELOPED COUNTRIES					
Petroleum	22	8.2	130	33.7	23.2
Manufacturing	110	40.7	80	20.7	29.0
Trade	23	8.5	36	9.3	9.0
Film	76	28.2	0	0	11.6
Other	38	14.1	139	36.0	27.0
Total	269	100.0	385	100.0	100.0
TOTAL WORLD ROYALTY PAYMENTS TO U.S. INDS.					
Developed Countries		54.8		22.1	76.9
Less-Dev. Countries		9.5		13.6	23.1
Total		64.3		35.7	100.0

[a]Percentages may not sum to 100% due to rounding error.

Source: Adapted from J. N. Friedlin and L. A. Lupo, "U.S. Direct Investments Abroad in 1973", Survey of Current Business, Part II, August 1974. See Tables 11 12 for primary data.

Another interesting statistic buried in Table 7 is that some 34% of all management fees paid by LDC's were for services sold to petroleum industries, whereas only 19% of the DC's management fees went to U.S. petroleum industries. Over 36% of the LDC's purchases were made by governments, defense establishments, and financial institutions. Although LDC's bought more royalty-type knowledge than management-type knowledge, their reliance on direct management of home firms by foreigners was much greater than shown by the DC's.

To gain some appreciation of why U.S. firms operate differently in the two economic regions, consider the rates of return displayed in Table 8. These figures are adapted from Friedlin and Lupo; unfortunately, they have only been computed for the years 1971-1973.

The table shows the ratio of reinvested earnings plus foreign withholding taxes to total earnings, broken down by region. The sum of the first two items -- reinvested earnings and taxes -- is a measure of the gross profits that remain in the host country. The other two items -- dividends and branch earnings -- may remain in the host country, but are free to come back to the U.S. home firm.

TABLE 8: REINVESTED PROFITS AS PERCENTAGE OF TOTAL MULTINATIONAL PROFITS[a]

	1971	1972	1973
Developed countries	51.5	59.0	63.9
Petroleum	59.4	80.7	78.5
Manufacturing	55.7	63.6	65.7
Other	29.2	42.6	51.1
Less-Developed countries	21.4	25.3	30.9
Petroleum	12.1	7.9	19.4
Manufacturing	54.1	63.2	66.6
Other	24.1	41.8	40.8

[a]Computed as the ratio of foreign withholding taxes plus reinvested earnings to total earnings.

Source: Adapted from Friedlin & Lupo, op. cit.

The larger the ratio, the more the host country retains within its private economy, either in the form of general tax revenue to the government, or in the form of increased plant capacity. Table 8 shows that DC hosts retain roughly twice as much of a multinational's income within their economy than do LDC's. The most noteworthy example is the petroleum industry in 1972. Developed nations retained some 81% of U.S. petroleum industry earnings as taxes and plow backs, whereas the LDC's kept less than 8%. The most equal case appears in manufacturing (1973), where both DC's and LDC's kept about 66% of the firm's return within the host economy.

The general picture forming around Table 8 is reflected in Table 9 where we look at the firm's informational income as a portion of all income. Column 1 shows the combined royalties and management fees broken down by type of U.S. exporting industry and by region. Column 2 shows the BEA concept of "return" as explicated in the Friedlin and Lupo paper. Return is defined as the sum of (i) branch earnings experienced in the U.S. affiliates or subsidiaries; (ii) plus dividends distributed by those affiliates; (iii) plus foreign withholding taxes; (iv) plus reinvested earnings. In 1973, branch earnings, dividends, and reinvested earnings accounted for 96% of "returns." Column 3 shows the ratio of royalties and management fees to total returns. This ratio expresses the relative importance of royalty-type income (from the sale of knowledge or information) relative to profit-type income collected by the U.S. multinational. The larger the ratio, the greater is the importance of direct sales of information; the smaller the ratio, the greater the U.S. firm's interest in branch earnings and reinvested earnings. Column 4 shows the industry's rate of return on investment, as computed by BEA.

When we reduce these numbers onto a chart, an interesting picture emerges. Figure 1 shows the result of a scatter with a straight line fitted through the observations. On the Y axis (dependent variable) is shown the industry rate of return on direct investment. On the X axis (independent variable) is shown the royalty and management fee income as a percent of total returns. The DC's and LDC's are superimposed in the same figure.

The ordinary least squares (OLS) regression on the DC's showed a significant direct relationship between the percentage of the return earned as royalty payments.

$$\hat{Y}_{dc} = -0.70007 + (0.37819)\ (x)$$

$$F = 6.173, \text{ significant @ 5\%}$$

$$R^2 = 0.46859$$

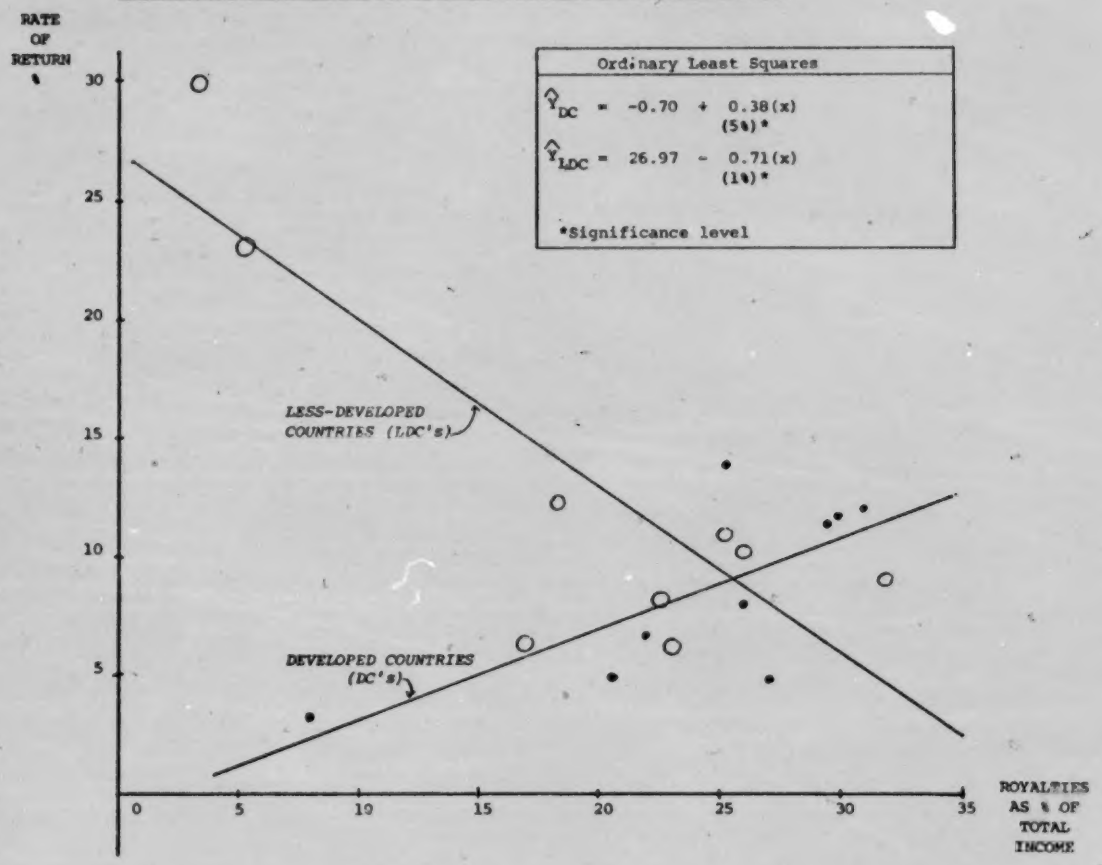
TABLE 9: RATES OF RETURN ON INVESTMENT AND ROYALTIES

($ Millions, Current)

AREA OF OPERATION INDUSTRY MEMBERSHIP OF U.S. MULTINATIONAL RECEIVING PAYMENTS	(1) ROYALTIES & FEES	(2) RETURN (INCOME)	ROYALTIES & FEES AS % OF TOTAL INCOME	% RETURN ON DIRECT INVESTMENT
1971				
Developed Countries				
All industries	1,594	5,414	29.4	10.0
Petroleum	127	465	27.3	4.7
Manufacturing	950	3,206	29.6	11.3
Other	517	1,743	29.7	11.7
Less-Developed Countries				
All industries	566	3,976	14.2	15.1
Petroleum	131	2,481	5.3	23.2
Manufacturing	158	628	25.2	10.8
Other	277	867	32.0	9.1
1972				
Developed Countries				
All industries	1,815	6,880	26.4	11.5
Petroleum	115	559	20.6	5.0
Manufacturing	1,102	4,363	25.3	13.9
Other	598	1,958	30.5	12.2
Less-Developed Countries				
All industries	600	4,606	13.0	16.0
Petroleum	173	2,753	6.3	23.3
Manufacturing	148	809	18.3	12.4
Other	279	1,044	26.7	10.2
1973				
Developed Countries				
All industries	2,182	10,330	21.1	6.2
Petroleum	128	1,542	8.3	3.5
Manufacturing	1,379	6,181	22.3	6.6
Other	675	2,607	25.9	7.8
Less-Developed Countries				
All industries	657	7,164	9.2	16.2
Petroleum	153	4,641	3.3	30.0
Manufacturing	191	1,104	17.3	5.6
Other	313	1,419	22.1	7.9

Source: Adapted from J. N. Friedlin and L. A. Lupo, "U.S. Direct Investments Abroad in 1973", Survey of Current Business, Part II, August 1974. See Tables 11 and 12 for primary data.

FIGURE 1: RATE OF RETURN AS A FUNCTION OF ROYALTY SALES, BY REGION



Even though the explained variance is quite modest, the coefficient is significant. Generally, the greater the percentage of royalty income to total income, the larger will be the firm's rate of return. Firms operating in DC's have found it more profitable to extract their profits in the form of information sales rather than as operating profits on manufacturing. To make a profit, they have sold or shared knowledge.

The OLS for the LDC's tells a very different story. Here the rate of return is inversely proportional to the independent variable.

$$\hat{Y}_{ldc} = 26.97476 - (0.70593)\ (x)$$

$$F = 18.988, \text{ significant @ } 1\%$$

$$R^2 = 0.73064$$

For sparse cross-sectional data, the amount of explained variance (73%) is a most intriguing result. Firms operating in LDC's apparently have found it much more profitable not to trade in information, but rather to set up their own facilities. The more information sold, the lower their rate of return.

Firms that operate in LDC's enjoy a higher rate of return when they concurrently draw less income on the sale of information, and they have a lower overall rate of return when they sell royalties and management fees rather than take their income in the form of branch earnings or dividends. But firms that operate in DC's seem to show the opposite relationship; the more information they sell as a proportion of total income, the higher their rate of return.

The data are too sparce to warrant a strong conclusion. In order to clearly establish a relationship, many more observations should be made, preferably controlling for the size of firm and industry. However, the fact that these simple estimates show opposite significant signs indicates that further research might be fruitful.

APPENDIX NINE

Table 10 shows the detail of three value-added components. Only employee compensation, proprietors' income and capital consumption allowance are included in the secondary information accounts. By assumption, all profits and taxes are allocated to the noninformation side of the firm.

Table 11 shows the detail of three final demand components. "Net Exports" includes only royalties and management fees sold by the secondary quasi-firms. "Federal Purchases" includes only procurement of Research & Development plus the wages of government information workers employed in "secondary" industries. State and local government purchase no R&D. Their entire final demand is secondary information labor services. These three final demand components are used in the secondary I-O matrix, shown in Appendix 10 (Vols. 4, 5).

Table 12 contains some additional data on the secondary national income time series. Column 1 is a ratio of secondary income to Gross National Product. Column 2 shows the unadjusted ratio of GNP to secondary income. It is unadjusted because the numerator contains information expenses of the primary sector, whereas the measure of productivity discussed in Chapter 9 does not. Column 3 shows an adjusted concept of secondary income, including an estimate of the bureaucracies inside primary information industries. Finally, Column 4 shows the ratio of modified secondary income to total national income. These statistics are presented for use by other researchers, and were not central to the tables shown in Chapter 9.

TABLE 10: DETAIL OF VALUE ADDED COMPONENTS OF THE SECONDARY SECTOR

($ Millions, 1967)

INDUSTRY	EMPLOYEE COMPENSATION (INFO WORKERS)	PROP. INCOME & UNPAID FAMILY	CAPITAL CONSUMPTION ALLOWANCES	TOTAL SECONDARY VALUE ADDED
Total	139,405.0	22,848.0	5,820.3	168,073.3
Total Private Sector	120,670.0	22,848.0	5,820.3	149,338.3
Total Public Sector	18,735.0	0	0	18,735.0
1. Livestock & livestock products	24.0	14.0	4.4	42.4
2. Other agriculture products	43.0	24.0	4.1	71.1
3. Forestry and fishery products	23.0	31.0	5.4	59.4
4. Argiculture, forestry, fishery svcs	166.0	120.0	8.4	294.4
5. Iron and feroalloy ores mining	69.0	2.0	1.5	72.5
6. Nonferrous metal ores mining	116.0	3.0	1.4	120.4
7. Coal mining	179.0	10.0	3.1	192.1
8. Crude petroleum & natural gas	481.0	100.0	227.9	808.9
9. Stone & clay mining & quarrying	217.0	16.0	22.4	255.4
10. Chemical & fertilizer mineral mining	55.0	5.0	2.6	62.6
11. New construction, net	7,084.0	1,328.0	1,298.7	9,710.7
12. Maintenance & repair construction, net	2,618.0	491.0	422.8	3,531.8
13. Ordnance and accessories	2,651.0	3.0	16.0	2,670.0
14. Food and kindred products	4,569.0	116.0	563.7	5,248.7
15. Tobacco manufacturers	247.0	1.0	5.7	253.7
16. Broad & narrow fabrics, yarn & thread mil	1,016.0	18.0	17.3	1,051.3
17. Misc textile goods & floor coverings	312.0	5.0	4.6	321.6
18. Apparel	2,182.0	77.0	33.6	2,292.6
19. Misc fabricated textile products	345.0	28.0	4.4	377.4
20. Lumber & wood products, exc containers,net	826.0	172.0	15.3	1,013.3
21. Wooden containers	50.0	5.0	.8	55.8
22. Household furniture	538.0	38.0	5.5	581.5
23. Other furniture & fixtures, net	180.0	13.0	2.5	195.5
24. Paper & allied products exc containers	1,145.0	7.0	184.4	1,336.4
25. Paperboard containers and boxes	726.0	7.0	39.7	772.7
26. Printing and publishing	514.0	29.0	21.8	564.8
27. Chemicals & selected chemical prod, net	2,213.0	12.0	117.0	2,342.0
28. Plastics & synthetic materials	855.0	4.0	40.6	899.6
29. Drugs,cleaning&toilet preparations	1,579.0	17.0	33.7	1,629.7
30. Paints & allied products	380.0	6.0	8.8	394.8
31. Petroleum refining & related industries	1,274.0	5.0	58.5	1,337.5
32. Rubber and miscellaneous plastics prods	1,651.0	24.0	26.9	1,701.9
33. Leather tanning & ind leather products	60.0	2.0	1.3	63.3

TABLE 10: DETAIL OF VALUE ADDED COMPONENTS OF THE SECONDARY SECTOR - (Cont'd)

($ Millions, 1967)

INDUSTRY	EMPLOYEE COMPENSATION (INFO WORKERS)	PROP. INCOME & UNPAID FAMILY	CAPITAL CONSUMPTION ALLOWANCES	TOTAL SECONDARY VALUE ADDED
34. Footwear & other leather products	436.0	16.0	4.5	456.5
35. Glass & glass products	554.0	11.0	12.6	577.6
36. Stone & clay products	1,345.0	66.0	46.6	1,457.6
37. Primary iron & steel manufacturing	2,842.0	15.0	123.0	2,980.0
38. Primary nonferrous metal mfg.	1,312.0	13.0	44.7	1,369.7
39. Metal containers	315.0	6.0	5.5	326.5
40. Heating,plumbing&structural metal prods	1,475.0	54.0	26.3	1,555.3
41. Stampings, screw machine prods & bolts	1,183.0	14.0	18.4	1,215.4
42. Other fabricated metal products	1,535.0	30.0	18.7	1,583.7
43. Engines & turbines	467.0	1.0	11.0	479.0
44. Farm machinery & equipment	550.0	7.0	13.9	570.9
45. Construction, mining & oil field equip	823.0	7.0	38.1	868.1
46. Materials handling mach & equipment	376.0	3.0	6.8	385.8
47. Metalworking mach & equipment	1,436.0	46.0	46.9	1,528.9
48. Special ind mach & equipment, net	733.0	22.0	15.2	770.2
49. General ind mach & equipment	1,203.0	37.0	42.7	1,282.7
50. Machine shop products	766.0	24.0	6.1	796.1
52. Service industry machines	539.0	17.0	21.5	577.5
53. Elec ind equip & apparatus, net	1,497.0	13.0	41.3	1,551.3
54. Household appliances	540.0	8.0	23.4	571.4
55. Elec lighting & wiring equip	635.0	5.0	12.7	652.7
58. Misc electrical mach, net	478.0	4.0	16.2	498.2
59. Motor vehicles & equipment	2,969.0	20.0	127.0	3,116.0
60. Aircraft and parts	5,077.0	12.0	74.6	5,163.6
61. Other transportation equipment	887.0	28.0	22.2	937.2
62. Scientific & controlling instruments	267.0	9.0	12.9	288.9
63. Optical, ophthalmic & photo equip, net	70.0	3.0	2.8	75.8
64. Misc manufacturing, net	1,035.0	91.0	14.5	1,140.5
65. Transportating & warehousing	7,272.0	522.0	321.4	8,115.4
68. Elec, gas, water & sanitary svcs	2,467.0	34.0	110.8	2,611.8
69. Wholesale & retail trade, net	32,279.0	9,585.0	582.7	42,446.7
70. Finance & insurance, net	469.0	73.0	34.6	576.6
71. Real estate and rental, net	1,474.0	1,011.0	279.3	2,764.3
72. Hotels; personal & rep svcs exc auto,net	1,779.0	1,882.0	79.4	3,740.4
73. Business services, net	2,837.0	3,536.0	161.9	6,534.9
75. Automobile repair & services	1,072.0	288.0	16.0	1,376.0
76. Amusements, net	504.0	220.0	55.9	779.9
77. Medical,educ'l svcs &nonprofit orgns.	4,331.0	2,318.0	124.1	6,773.1
85. Rest of the world	32.0	0	0	32.0
86. Household industry	421.0	64.0	0	485.0
Federal General Government	6,357.0	0	0	6,357.0
State & Local Government	9,601.0	0	0	9,601.0
Federal Government Enterprises	1,336.0	0	0	1,336.0
State & Local Government Enterprises	1,441.0	0	0	1,441.0

TABLE 11: DETAIL OF FINAL DEMAND COMPONENTS OF THE SECONDARY SECTOR

($ Millions, 1967)

	NET EXPORTS	FEDERAL PURCHASES	STATE AND LOCAL PURCHASES	TOTAL SECONDARY FINAL DEMAND
Total	1,586.3	14,812.0	11,042.0	27,440.0
Total Private Sector	1,586.3	7,118.7	0	8,705.0
Total Public Sector	0	7,693.0	11,042.0	18,735.0
1. Livestock & livestock products	0	.2	0	.2
2. Other agriculture products	.2	.2	0	.4
3. Forestry and fishery products	0	0	0	0
4. Argiculture, forestry, fishery svcs	0	0	0	0
5. Iron and feroalloy ores mining	7.7	0	0	7.7
6. Nonferrous metal ores mining	2.0	1.9	0	3.9
7. Coal mining	.7	0	0	.7
8. Crude petroleum & natural gas	2.2	0	0	2.2
9. Stone & clay mining & quarrying	.2	0	0	.2
10. Chemical & fertilizer mineral mining	.2	0	0	.2
11. New construction, net	12.8	191.2	0	204.1
12. Maintenance & repair construction, net	0	0	0	0
13. Ordnance and accessories	0	3,328.7	0	3,328.7
14. Food and kindred products	84.4	11.2	0	95.6
15. Tobacco manufacturers	2.9	0	0	2.9
16. Broad & narrow fabrics, yarn & thread mil	1.5	1.7	0	3.2
17. Misc textile goods & floor coverings	0	0	0	0
18. Apparel	.7	0	0	.7
19. Misc fabricated textile products	.4	.2	0	.6
20. Lumber & wood products, exc containers,net	.3	0	0	.3
21. Wooden containers	0	0	0	0
22. Household furniture	.2	4.5	0	4.7
23. Other furniture & fixtures, net	0	0	0	0
24. Paper & allied products exc containers	22.2	1.0	0	23.2
25. Paperboard containers and boxes	.9	0	0	.9
26. Printing and publishing	.3	0	0	.3
27. Chemicals & selected chemical prod, net	101.1	120.0	0	221.1
28. Plastics & synthetic materials	38.6	52.2	0	90.8
29. Drugs,cleaning&toilet preparations	25.5	8.0	0	33.5
30. Paints & allied products	3.0	.5	0	3.5
31. Petroleum refining & related industries	153.0	9.6	0	163.4
32. Rubber and miscellaneous plastics prods	13.5	3.9	0	17.4
33. Leather tanning & ind leather products	.5	0	0	.5

TABLE 11: DETAIL OF FINAL DEMAND COMPONENTS OF THE SECONDARY SECTOR - (Cont'd)

($ Millions, 1967)

	NET EXPORTS	FEDERAL PURCHASES	STATE AND LOCAL PURCHASES	TOTAL SECONDARY FINAL DEMAND
34. Footwear & other leather products	.2	0	0	.2
35. Glass & glass products	10.0	.2	0	10.2
36. Stone & clay products	12.9	6.6	0	19.5
37. Primary iron & steel manufacturing	9.3	1.0	0	10.3
38. Primary nonferrous metal mfg.	10.9	16.8	0	27.2
39. Metal containers	.5	3.2	0	3.7
40. Heating,plumbing&structural metal prods	9.2	24.5	0	33.7
41. Stampings, screw machine prods & bolts	8.6	18.4	0	27.0
42. Other fabricated metal products	14.8	9.9	0	24.7
43. Engines & turbines	9.8	6.8	0	16.6
44. Farm machinery & equipment	11.2	4.1	0	15.3
45. Construction, mining & oil field equip	34.0	4.8	0	38.8
46. Materials handling mach & equipment	3.3	13.7	0	17.0
47. Metalworking mach & equipment	12.2	22.1	0	34.3
48. Special ind mach & equipment, net	16.9	5.7	0	22.6
49. General ind mach & equipment	16.5	15.2	0	31.7
50. Machine shop products	1.6	5.0	0	6.6
52. Service industry machines	9.2	1.1	0	10.3
53. Elec ind equip & apparatus, net	13.2	179.1	0	192.3
54. Household appliances	5.3	2.9	0	8.2
55. Elec lighting & wiring equip	5.9	.8	0	6.7
58. Misc electrical mach, net	4.7	8.1	0	12.8
59. Motor vehicles & equipment	54.9	33.3	0	88.2
60. Aircraft and parts	44.4	2,653.2	0	2,697.6
61. Other transportation equipment	5.3	4.3	0	9.6
62. Scientific & controlling instruments	4.9	10.4	0	15.3
63. Optical, ophthalmic & photo equip, net	.4	2.4	0	2.8
64. Misc manufacturing, net	11.8	3.2	0	15.0
65. Transportating & warehousing	7.5	2.1	0	9.6
68. Elec, gas, water & sanitary svcs	30.2	1.4	0	31.6
69. Wholesale & retail trade, net	92.3	0	0	92.3
70. Finance & insurance, net	0	0	0	0
71. Real estate and rental, net	348.4	0	0	348.4
72. Hotels; personal & rep svcs exc auto,net	2.6	7.0	0	9.6
73. Business services, net	278.2	172.1	0	450.3
75. Automobile repair & services	0	0	0	0
76. Amusements, net	9.4	0	0	9.4
77. Medical,educ'l svcs &nonprofit orgns.	0	110.2	0	110.2
78. Federal govt enterprises, net	0	0	0	0
79. State & local govt enterprises	0	.1	0	.1
80. Imports	0	34.0	0	34.0
81. Business travel, entertain & gifts	0	0	0	0
82. Office supplies	0	0	0	0
General Government[a]	0	7,693.0	11,042.0	18,735.0

[a]Employee compensation of secondary information workers.

TABLE 12:

ADDITIONAL TIME SERIES DATA ON THE SECONDARY INFORMATION SECTOR, 1929-1974

($ Millions, Current)

Year	$\frac{N^s}{GNP}$ %	$\frac{GNP}{N^s}$	$\tilde{N}^s$ $	$\frac{\tilde{N}^s}{N^t}$ %
	a	b	c	d
1929	11.0	9.1	13,505.5	15.6
1930	11.3	8.2	12,212.5	16.2
1931	9.2	10.9	8,412.4	14.1
1932	6.6	15.2	4,710.0	11.0
1933	6.4	15.6	4,412.3	10.9
1934	8.4	11.9	6,617.1	13.4
1935	9.6	10.4	8,330.8	14.6
1936	9.4	10.6	9,357.9	14.4
1937	10.9	9.2	11,737.4	15.9
1938	9.3	10.8	9,492.8	14.1
1939	9.9	10.1	10,743.4	14.8
1940	10.8	9.3	12,809.5	15.8
1941	13.4	7.5	19,491.0	18.7
1942	15.6	6.4	28,561.8	20.9
1943	17.0	5.9	37,621.5	22.1
1944	16.7	6.0	40,647.5	22.3
1945	15.5	6.4	38,768.2	21.4
1946	16.1	6.2	39,878.0	21.9
1947	17.2	5.8	46,982.2	23.6
1948	18.4	5.4	55,748.4	24.7
1949	17.1	5.9	52,172.0	23.8
1950	17.9	5.6	60,445.3	24.9
1952	17.2	5.8	71,123.4	24.2
1954	18.4	5.4	81,088.3	26.6
1956	19.6	5.1	99,762.0	28.3
1958	19.1	5.2	105,144.1	28.4
1959	19.6	5.1	117,540.4	29.1
1960	19.6	5.1	122,822.0	29.4
1961	19.5	5.1	126,778.3	29.5
1963	20.1	5.0	148,711.4	30.7
1965	20.6	4.9	177,418.1	31.4
1967	20.4	4.9	205,298.7	31.3
1969	20.5	4.9	243,966.0	31.6
1970	20.1	5.0	252,616.2	31.4
1971	20.1	5.0	273,723.5	31.6
1972	20.4	4.9	305,593.7	31.9
1973	21.1	4.7	351,602.0	32.7
1974	20.6	4.9	372,279.9	31.4

[a] Secondary information national income as percent of gross national product.

[b] Units of GNP produced per unit of secondary national income.

[c] Modified version of secondary national income, including the bureaucracies inside primary information firms.

[d] Modified secondary income as percent of total income.

APPENDICES FIVE AND SEVEN

These appendices contain the following backup material to Chapters 5 and 7 of Volume I:

(i) A discussion of the sources and methods used in the compilation of the 1929-1974 time series of national income accounts.

(ii) A discussion of the sources and methods used in the compilation of the two and four sector 1860-1980 time series of the national labor force.

(iii) The detailed time series of national accounts, including the primary information sector (Table 13).

(iv) The detailed time series, at the two and four sector level, of the national work force, including information workers (Tables 14 and 15).

Sources and Methods

This time series is an extension of Table 5.2 of Chapter 5. The following section summarizes how the data were developed, and serves as a guide to the reliability of the data.

National income data were not readily available for many industries at the 7-digit SIC level; and in some cases, they were only available at the 2- or 3-digit SIC level. Hence, we adopted a procedure for estimating national income that we feel is accurate to $\pm$ 5% in most cases.

The starting data base is the national income time series produced by the Bureau of Economic Analysis (BEA). In some cases, the entire industry at the 2-digit level was allocated to information (e.g., "Communications"), and the national income estimate is as good as BEA's. In other cases, fairly extensive prorations were done at the 4-digit SIC level. The economic censuses usually report "value added" for the manufacturing industries at the 4-digit SIC level. However, the census definition and the BEA definition vary considerably. Value added as reported in the Census of Manufacturers is defined as the difference between total revenues and the cost of goods sold. The BEA procedure for estimating value added is to aggregate upwards by adding the individual components (e.g., employee compensation, profits, depreciation). Since definitions of cost of goods sold, revenues realized, profits and depreciation vary between accounting schema, and since both sets of data are subject to sampling error, differences of up to 15% can be found between the two value-added estimates. However, we have used the BEA's national income estimates wherever possible, and prorated BEA's estimates wherever a finer allocation was necessary. In

the manufacturing industries, the value added of the relevant industries -- computed at a 4-digit level or deeper -- was measured as a percent of total value added at the 2-digit level. This proration was then applied against BEA's national income estimate at the 2-digit level.

The service industries were treated somewhat differently. In many cases, the entire industry was "lifted" (e.g., legal services) and no proration was necessary. Where a proration was necessary (e.g., "miscellaneous repair services"), we had a choice to prorate on either employee compensation or total receipts. A brief (unreported) study showed that the total-receipts method of proration more accurately reflects national income than by prorating on employee compensation. The reason is that in the service industries, a considerable amount of national income originates with proprietors' retained earnings. These are omitted from "employee compensation," hence the proration is biased downwards. The service industries, then, were prorated on the ratio of receipts at the 4-digit level as a fraction of total receipts at the 2-digit level. The proration was then used to divide the industry's share of national income into information vs. noninformation.

Quality of the Estimates

Certain industries could not be prorated without resorting to dubious techniques; others are solid estimates. In all fairness to the reader, we felt that the areas of weakness should be spotlighted. This section briefly explains how each industry's estimate was derived.

CONSTRUCTION

This sector includes office buildings, school facilities, and telephone and telegraph buildings. The 1963 and 1967 estimates were drawn directly from BEA estimates. For other years (1930-1974), we used industry statistics showing total revenues of the office and bank building construction activities.[5] These data understate the total revenue accruing from information structure construction, since they do not report all government construction activities. The Dodge summary was also used for education buildings. Here, too, the estimates understate the activity since Dodge uses a narrow definition of what constitutes an "education building."

TELEPHONE AND TELEGRAPH BUILDINGS

The Federal Communications Commission provides estimates of construction activities.[6] These were adapted to conform to BEA's definition, which includes some equipment and facilities as part of the construction budget. Repair and maintenance construction were estimated using the 1967 ratios between new construction and repairs, since no other data were available. This number is subject to error.

PAPER AND ALLIED PRODUCTS
PRINTING AND PUBLISHING
OFFICE FURNITURE
MACHINERY, EXCEPT ELECTRICAL
ELECTRICAL MACHINERY
MISCELLANEOUS MANUFACTURING

These industries were computed using value-added data as reported in the Census of Manufacturers. Value-added at the 4-digit level was summed for all information industries (with prorations down to the 7-digit level for PAPER and OFFICE FURNITURE), and that ratio was applied against BEA's national income estimates. The relevant census years are 1929, 1933, 1939, 1948, 1952, and 1958 through 1972. All other years were interpolated using a straight-line method.

SCIENTIFIC INSTRUMENTS

Same as above, except that before 1948 the industry's national income is primarily included in "miscellaneous manufacturing." Definitional vagaries cause discontinuous jumps in the time series which should not be confused with real changes in industry activity.

BANKING
COMMUNICATION
CREDIT AGENCIES
INSURANCE AGENTS
INSURANCE CARRIERS
HOLDING COMPANIES

These industries were entirely allocated to information services, as explained in detail in Appendix 3 (Vol. 2). Hence, the estimates of national income are reliable.

SECURITY AND COMMODITY BROKERS

The 1967 proration of security and commodity brokers' income allocated to information was 76%. This static proration was used through the entire time series, as no further data were available.

REAL ESTATE

Commissions of real estate brokers and agents were taken from the Census of Business. Estimates for royalty-type income were not included. Estimates of office rentals were computed using an index of "information workers" developed from Chapter 7, and adapted from the known 1967 office and bank building rentals per information worker.

PERSONAL SERVICES
MISCELLANEOUS REPAIR SERVICES
MISCELLANEOUS BUSINESS SERVICES
AMUSEMENTS

Prorations were derived from the Census of Business at the 4-digit SIC level for the years 1933, 1939, 1948, 1954, 1958, 1963, and 1972. Straight-line prorations were used for the other years.

MEDICAL AND HEALTH SERVICES

The only relevant proration following the discussion in Appendix 3 (Vol. 2) is physician's office income. The allocation to information services was based on personal consumption expenditures on physicians' offices, taken from the benchmark BEA national accounts. Fifty percent of personal consumption was allocated to information; all other expenditures were omitted.

LEGAL SERVICES
EDUCATION (PRIVATE)
MOTION PICTURES

The entire industry was allocated to information services, hence all of national income at the 2-digit level was transferred.

NONPROFIT ORGANIZATIONS

No detailed data were available for nonprofits, hence we used the 1967 prorations (80%) for the entire period.

FEDERAL GOVERNMENT -- GENERAL

The employee compensation to Federal government workers was divided into three parts: (i) compensation paid to workers in "primary" information industries or their equivalents; (ii) to "secondary" industries or their equivalents; and (iii) to "special government functions." See Chapter 8 for detailed description. Only the first type is included here -- the wages of government workers in "primary" type Federal industries.

FEDERAL GOVERNMENT ENTERPRISES

Only the employee compensation of Postal Service workers (prorated to exclude noninformation workers) is included here.

STATE AND LOCAL GOVERNMENTS -- GENERAL

Only education is counted as a state and local primary information industry, hence only the employee compensation of education workers is included here. Sources of data are U.S. Department of Commerce for 1948-1974, with additional estimates to 1935.[7] Prorations for 1929-1935 assume constant expenditures for education during those six years.

Redefinitions

Between 1929 and 1974, the Standard Industrial Classification system was changed numerous times. Before 1958 there was no established classification scheme; it was retroactively adapted by the Bureau of the Census in an attempt to make the data consistent.[8] The SIC scheme was subsequently changed in 1963, 1967, and 1972. No attempt to report the impact of the redefinitions is made, since there are too many. However, minor anomalies in the time series are partially explained by such definitional changes.

Labor Force

Two studies of the work force are included in this appendix. A simple two-sector aggregation of information and noninformation; and a more complex four-sector aggregation of information, agriculture, industry and services are developed from 1860 through 1980.

The tables were developed from decennial census surveys of population. Table 14 utilizes both inclusive and restrictive definitions of information workers. Table 15 uses a media definition bounded by Table 14.

TABLE 13:

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 (*$ Millions Current*)

INDUSTRY	1929 NAT. INCOME	1929 INFOR-MATION	1929 %INFO	1930 NAT. INCOME	1930 INFOR-MATION	1930 %INFO	1931 NAT. INCOME	1931 INFOR-MATION	1931 %INFO
Agriculture	8473.	0.	0.0	6400.	0.	0.0	5165.	0.	0.0
Mining	2101.	0.	0.0	1660.	0.	0.0	960.	0.	0.0
Construction	3835.	568.	14.800	3199.	478.	14.933	2220.	334.	15.067
Manufacturing	21945.	2190.	9.980	18296.	1978.	10.811	12482.	1511.	12.104
Nondurable goods	10642.	1526.	14.340	9761.	1446.	14.810	7525.	1178.	15.652
Paper & allied products	558.	113.	20.200	502.	105.	20.850	387.	83.	21.500
Printing,publish&allied inds	1588.	1413.	89.000	1503.	1341.	89.214	1224.	1095.	89.429
Nondurable manufacturing,nec	8496.	0.	0.0	7756.	0.	0.0	5914.	0.	0.0
Durable goods	11303.	664.	5.874	8535.	532.	6.239	4957.	333.	6.718
Furniture	675.	71.	10.500	506.	54.	10.688	372.	40.	10.875
Machinery, exc electrical	1891.	166.	8.800	1483.	131.	8.825	757.	67.	8.850
Electrical machinery	1047.	293.	28.000	826.	234.	28.312	508.	145.	28.625
Instruments	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Misc manufacturing	607.	134.	22.000	504.	114.	22.550	347.	80.	23.100
Durable manufacturing,nec	7083.	0.	0.0	5216.	0.	0.0	2973.	0.	0.0
Transportation	6605.	0.	0.0	5594.	0.	0.0	4363.	0.	0.0
Communication	1128.	1128.	100.000	1092.	1092.	100.000	1000.	1000.	100.000
Electric,gas&sanitary services	1638.	0.	0.0	1644.	0.	0.0	1598.	0.	0.0
Wholesale & retail trade	13511.	1754.	12.983	12357.	1657.	13.409	9911.	1405.	14.171
Finance,insurance&real estate	12813.	4918.	38.382	10707.	3686.	34.425	8761.	2867.	32.720
Banking	2016.	2016.	100.000	1641.	1641.	00.000	1206.	1206.	100.000
Credit agencies	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Security & commodity brokers	726.	563.	77.600	97.	75.	77.600	-45.	-35.	77.600
Insurance carriers	849.	849.	100.000	775.	775.	100.000	696.	696.	100.000
Insurance agents	421.	421.	100.000	402.	402.	100.000	366.	366.	100.000
Real estate	8630.	898.	10.400	7806.	807.	10.333	6580.	676.	10.267
Holding companies	169.	169.	100.000	-14.	-14.	100.000	-42.	-42.	100.000
Services	8843.	3066.	34.667	8371.	3026.	36.150	7236.	2799.	38.687
Personal services	1287.	50.	3.900	1218.	48.	3.900	1040.	41.	3.900
Miscellaneous business services	608.	231.	38.000	606.	230.	37.967	481.	182.	37.933
Miscellaneous repair services	315.	14.	4.600	306.	14.	4.600	276.	13.	4.600
Motion pictures	440.	440.	100.000	438.	438.	100.000	361.	361.	100.000
Amusements & recreation	379.	42.	11.000	336.	35.	10.500	268.	27.	10.000
Medical & health services	1536.	479.	31.200	1476.	462.	31.300	1306.	410.	31.400
Legal services	689.	689.	100.000	683.	683.	100.000	701.	701.	100.000
Education services	402.	402.	100.000	413.	413.	100.000	412.	412.	100.000
Nonprofit membership organizations	640.	512.	80.000	649.	519.	80.000	626.	501.	80.000
Miscellaneous professional services	206.	206.	100.000	184.	184.	100.000	152.	152.	100.000
Services, nec	2341.	0.	0.0	2062.	0.	0.0	1613.	0.	0.0
Government and government enterprises	5093.	2218.	43.549	5316.	2315.	43.549	5426.	2371.	43.690
Federal	1460.	697.	47.762	1499.	713.	47.545	1503.	716.	47.616
General government	879.	252.	28.700	915.	265.	29.000	921.	270.	29.300
Government enterprises	581.	445.	76.600	584.	447.	76.600	582.	446.	76.600
State and local	3633.	1521.	41.856	3817.	1602.	41.980	3923.	1655.	42.186
General government	3456.	1521.	44.000	3630.	1602.	44.143	3737.	1655.	44.286
Government enterprises	177.	0.	0.0	187.	0.	0.0	186.	0.	0.0
Rest of the world	810.	0.	0.0	746.	0.	0.0	547.	0.	0.0
Private Sector	81702.	13623.	16.674	70066.	11917.	17.008	54243.	9916.	18.280
All industries, TOTAL	86795.	15841.	18.251	75382.	14232.	18.879	59669.	12286.	20.591

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1932 NAT. INCOME	1932 INFOR-MATION	1932 %INFO	1933 NAT. INCOME	1933 INFOR-MATION	1933 %INFO	1934 NAT. INCOME	1934 INFOR-MATION	1934 %INFO
Agriculture	3506.	0.	0.0	3872.	0.	0.0	4136.	0.	0.0
Mining	681.	0.	0.0	628.	0.	0.0	1145.	0.	0.0
Construction	1081.	164.	15.200	788.	120.	15.200	1118.	172.	15.375
Manufacturing	7334.	1021.	13.918	7705.	982.	12.744	11100.	1243.	11.201
Nondurable goods	5248.	857.	16.338	4944.	793.	16.041	6488.	953.	14.686
Paper & allied products	269.	60.	22.150	290.	66.	22.800	418.	98.	23.450
Printing,publish&allied inds	890.	798.	89.643	809.	727.	89.857	949.	855.	90.071
Nondurable manufacturing,nec	4089.	0.	0.0	3845.	0.	0.0	5121.	0.	0.0
Durable goods	2066.	163.	7.830	2761.	189.	6.841	4612.	291.	6.299
Furniture	211.	23.	11.062	182.	20.	11.250	283.	32.	11.437
Machinery, exc electrical	304.	27.	8.875	426.	38.	8.900	739.	66.	8.925
Electrical machinery	250.	72.	28.937	279.	82.	29.250	383.	113.	29.562
Instruments	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Misc manufacturing	172.	41.	23.650	202.	49.	24.200	319.	79.	24.750
Durable manufacturing,nec	1149.	0.	0.0	1672.	0.	0.0	2888.	0.	0.0
Transportation	3216.	0.	0.0	3038.	0.	0.0	3419.	0.	0.0
Communication	812.	812.	100.000	702.	702.	100.000	771.	771.	100.000
Electric,gas&sanitary services	1463.	0.	0.0	1287.	0.	0.0	1419.	0.	0.0
Wholesale & retail trade	6532.	966.	14.792	5625.	817.	14.524	8310.	1105.	13.296
Finance,insurance&real estate	6956.	2336.	33.580	5877.	2095.	35.646	5641.	2059.	36.496
Banking	915.	915.	100.000	692.	692.	100.000	539.	539.	100.000
Credit agencies	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Security & commodity brokers	100.	78.	77.600	191.	148.	77.600	214.	166.	77.600
Insurance carriers	564.	564.	100.000	552.	552.	100.000	636.	636.	100.000
Insurance agents	328.	328.	100.000	289.	289.	100.000	315.	315.	100.000
Real estate	5120.	522.	10.200	4164.	425.	10.200	3927.	393.	10.000
Holding companies	-71.	-71.	100.000	-11.	-11.	100.000	10.	10.	100.000
Services	5661.	2271.	40.116	5141.	2180.	42.397	5782.	2346.	40.573
Personal services	814.	32.	3.900	707.	28.	3.900	790.	30.	3.820
Miscellaneous business services	385.	146.	37.900	358.	136.	37.900	455.	164.	35.980
Miscellaneous repair services	228.	10.	4.600	191.	9.	4.600	203.	12.	5.820
Motion pictures	194.	194.	100.000	210.	210.	100.000	283.	283.	100.000
Amusements & recreation	177.	17.	9.500	154.	15.	9.500	197.	18.	9.040
Medical & health services	1037.	331.	31.900	948.	339.	35.800	1036.	340.	32.800
Legal services	591.	591.	100.000	561.	561.	100.000	600.	600.	100.000
Education services	393.	393.	100.000	363.	363.	100.000	361.	361.	100.000
Nonprofit membership organizations	569.	455.	80.000	527.	422.	80.000	532.	426.	80.000
Miscellaneous professional services	102.	102.	100.000	98.	98.	100.000	113.	113.	100.000
Services, nec	1171.	0.	0.0	1024.	0.	0.0	1212.	0.	0.0
Government and government enterprises	5150.	2263.	43.904	5326.	2293.	43.060	6271.	2662.	42.448
Federal	1424.	677.	47.555	1649.	720.	43.635	2234.	925.	41.416
General government	880.	260.	29.600	1164.	348.	29.900	1694.	512.	30.200
Government enterprises	544.	417.	76.600	485.	372.	76.600	540.	414.	76.600
State and local	3726.	1584.	42.509	3677.	1574.	42.802	4037.	1737.	43.020
General government	3565.	1584.	44.429	3531.	1574.	44.571	3884.	1737.	44.714
Government enterprises	161.	0.	0.0	146.	0.	0.0	153.	0.	0.0
Rest of the world	393.	0.	0.0	323.	0.	0.0	303.	0.	0.0
Private Sector	37635.	7570.	20.114	34986.	6895.	19.709	43144.	7696.	17.837
All industries, TOTAL	42765.	9831.	22.978	40312.	9189.	22.794	49415.	10358.	20.961

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1935 NAT. INCOME	1935 INFOR-MATION	1935 %INFO	1936 NAT. INCOME	1936 INFOR-MATION	1936 %INFO	1937 NAT. INCOME	1937 INFOR-MATION	1937 %INFO
Agriculture	6650.	0.	0.0	5749.	0.	0.0	7597.	0.	0.0
Mining	1217.	0.	0.0	1547.	0.	0.0	1990.	0.	0.0
Construction	1342.	209.	15.550	2042.	321.	15.725	2104.	335.	15.900
Manufacturing	13390.	1451.	10.834	16294.	1706.	10.472	19450.	1918.	9.863
Nondurable goods	7313.	1059.	14.479	8224.	1195.	14.532	9591.	1285.	13.402
Paper & allied products	460.	111.	24.100	503.	124.	24.750	564.	143.	25.400
Printing,publish&allied inds	1050.	948.	90.286	1183.	1071.	90.500	1259.	1142.	90.714
Nondurable manufacturing,nec	5803.	0.	0.0	6538.	0.	0.0	7768.	0.	0.0
Durable goods	6077.	392.	6.448	8070.	511.	6.335	9859.	633.	6.421
Furniture	341.	40.	11.625	441.	52.	11.812	507.	61.	12.000
Machinery, exc electrical	1016.	91.	8.950	1399.	126.	8.975	1761.	158.	9.000
Electrical machinery	529.	158.	29.875	712.	215.	30.187	916.	279.	30.500
Instruments	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Misc manufacturing	408.	103.	25.300	459.	119.	25.850	511.	135.	26.400
Durable manufacturing,nec	3783.	0.	0.0	5059.	0.	0.0	6166.	0.	0.0
Transportation	3693.	0.	0.0	4266.	0.	0.0	4635.	0.	0.0
Communication	807.	807.	100.000	884.	884.	100.000	984.	984.	100.000
Electric,gas&sanitary services	1439.	0.	0.0	1556.	0.	0.0	1716.	0.	0.0
Wholesale & retail trade	9408.	1233.	13.109	10768.	1417.	13.157	12354.	1499.	12.134
Finance,insurance&real estate	5988.	2335.	38.987	6652.	2711.	40.752	7251.	2934.	40.467
Banking	662.	662.	100.000	775.	775.	100.000	893.	893.	100.000
Credit agencies	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Security & commodity brokers	227.	176.	77.600	346.	268.	77.600	241.	187.	77.600
Insurance carriers	709.	709.	100.000	785.	785.	100.000	886.	886.	100.000
Insurance agents	330.	330.	100.000	347.	347.	100.000	386.	386.	100.000
Real estate	3994.	391.	9.800	4274.	410.	9.600	4705.	442.	9.400
Holding companies	66.	66.	100.000	125.	125.	100.000	140.	140.	100.000
Services	6183.	2468.	39.923	6847.	2677.	39.091	7514.	2816.	37.477
Personal services	865.	32.	3.740	962.	35.	3.660	1113.	40.	3.580
Miscellaneous business services	512.	174.	34.060	610.	196.	32.140	649.	196.	30.220
Miscellaneous repair services	218.	15.	7.040	230.	19.	8.260	247.	23.	9.480
Motion pictures	329.	329.	100.000	391.	391.	100.000	437.	437.	100.000
Amusements & recreation	211.	18.	8.580	253.	21.	8.120	305.	23.	7.660
Medical & health services	1115.	367.	32.900	1253.	411.	32.800	1323.	429.	32.400
Legal services	624.	624.	100.000	647.	647.	100.000	680.	680.	100.000
Education services	365.	365.	100.000	376.	376.	100.000	394.	394.	100.000
Nonprofit membership organizations	526.	422.	80.000	546.	437.	80.000	547.	438.	80.000
Miscellaneous professional services	121.	121.	100.000	144.	144.	100.000	156.	156.	100.000
Services, nec	1295.	0.	0.0	1435.	0.	0.0	1663.	0.	0.0
Government and government enterprises	6724.	2884.	42.887	8108.	3270.	40.329	7772.	3201.	41.182
Federal	2382.	1010.	42.383	4232.	1607.	37.964	3688.	1445.	39.183
General government	1768.	539.	30.500	3570.	1100.	30.800	3013.	928.	30.800
Government enterprises	614.	470.	76.600	662.	507.	76.600	675.	517.	76.600
State and local	4342.	1874.	43.163	3876.	1663.	42.910	4084.	1756.	42.987
General government	4178.	1874.	44.857	3696.	1663.	45.000	3889.	1756.	45.143
Government enterprises	164.	0.	0.0	180.	0.	0.0	195.	0.	0.0
Rest of the world	367.	0.	0.0	300.	0.	0.0	283.	0.	0.0
Private Sector	50484.	8503.	16.842	56905.	9716.	17.073	65878.	10486.	15.918
All industries, TOTAL	57208.	11386.	19.903	65013.	12985.	19.974	73650.	13687.	18.584

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1938 NAT. INCOME	1938 INFOR-MATION	1938 %INFO	1939 NAT. INCOME	1939 INFOR-MATION	1939 %INFO	1940 NAT. INCOME	1940 INFOR-MATION	1940 %INFO
Agriculture	5945.	0.	0.0	6026.	0.	0.0	6141.	0.	0.0
Mining	1544.	0.	0.0	1633.	0.	0.0	1932.	0.	0.0
Construction	2005.	319.	15.900	2342.	372.	15.900	2589.	412.	15.900
Manufacturing	15151.	1670.	11.025	18094.	1854.	10.246	22481.	2116.	9.413
Nondurable goods	8407.	1187.	14.123	9093.	1253.	13.778	10314.	1321.	12.808
Paper & allied products	572.	145.	25.400	555.	140.	25.222	664.	166.	25.044
Printing,publish&allied inds	1146.	1042.	90.929	1221.	1113.	91.143	1264.	1155.	91.357
Nondurable manufacturing,nec	6689.	0.	0.0	7317.	0.	0.0	8386.	0.	0.0
Durable goods	6744.	483.	7.162	9001.	601.	6.677	12167.	795.	6.535
Furniture	422.	51.	12.000	507.	60.	11.889	563.	66.	11.778
Machinery, exc electrical	1251.	113.	9.000	1496.	135.	9.032	2180.	198.	9.063
Electrical machinery	665.	203.	30.500	858.	268.	31.247	1136.	363.	31.995
Instruments	0.	0.	79.000	0.	0.	79.000	0.	0.	79.000
Misc manufacturing	443.	117.	26.400	522.	138.	26.350	638.	168.	26.300
Durable manufacturing,nec	3963.	0.	0.0	5618.	0.	0.0	7650.	0.	0.0
Transportation	4054.	0.	0.0	4643.	0.	0.0	5039.	0.	0.0
Communication	1007.	1007.	100.000	1075.	1075.	100.000	1111.	1111.	100.000
Electric,gas&sanitary services	1691.	0.	0.0	1766.	0.	0.0	1925.	0.	0.0
Wholesale & retail trade	12096.	1547.	12.787	12604.	1572.	12.475	14460.	1677.	11.597
Finance,insurance&real estate	7744.	2975.	38.421	7991.	2997.	37.501	8301.	3133.	37.737
Banking	844.	844.	100.000	880.	880.	100.000	980.	980.	100.000
Credit agencies	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Security & commodity brokers	190.	147.	77.600	204.	158.	77.600	186.	144.	77.600
Insurance carriers	908.	908.	100.000	904.	904.	100.000	872.	872.	100.000
Insurance agents	383.	383.	100.000	390.	390.	100.000	405.	405.	100.000
Real estate	5205.	479.	9.200	5450.	501.	9.200	5672.	545.	9.613
Holding companies	214.	214.	100.000	163.	163.	100.000	186.	186.	100.000
Services	7225.	2789.	38.606	7554.	2879.	38.107	8026.	3051.	38.010
Personal services	1028.	36.	3.500	1053.	37.	3.500	1158.	42.	3.662
Miscellaneous business services	835.	180.	28.300	676.	191.	28.300	702.	237.	33.712
Miscellaneous repair services	259.	28.	10.700	261.	28.	10.700	261.	28.	10.787
Motion pictures	426.	426.	100.000	434.	434.	100.000	448.	448.	100.000
Amusements & recreation	256.	18.	7.200	288.	21.	7.200	310.	22.	7.250
Medical & health services	1330.	418.	31.400	1381.	435.	31.500	1463.	458.	31.300
Legal services	666.	666.	100.000	692.	692.	100.000	719.	719.	100.000
Education services	409.	409.	100.000	415.	415.	100.000	424.	424.	100.000
Nonprofit membership organizations	556.	445.	80.000	556.	445.	80.000	599.	479.	80.000
Miscellaneous professional services	164.	164.	100.000	181.	181.	100.000	193.	193.	100.000
Services, nec	1456.	0.	0.0	1617.	0.	0.0	1753.	0.	0.0
Government and government enterprises	8524.	3225.	37.829	8523.	3336.	39.143	8762.	3506.	40.018
Federal	4203.	1358.	32.318	4133.	1435.	34.720	4235.	1552.	36.643
General government	3505.	824.	23.500	3414.	884.	25.900	3489.	980.	28.100
Government enterprises	698.	535.	76.600	719.	551.	76.600	746.	571.	76.600
State and local	4321.	1866.	43.190	4390.	1901.	43.307	4527.	1955.	43.176
General government	4121.	1866.	45.286	4185.	1901.	45.429	4289.	1955.	45.571
Government enterprises	200.	0.	0.0	205.	0.	0.0	238.	0.	0.0
Rest of the world	366.	0.	0.0	313.	0.	0.0	357.	0.	0.0
Private Sector	58848.	10307.	17.515	64041.	10749.	16.784	72362.	11499.	15.891
All industries, TOTAL	67372.	13532.	20.085	72564.	14085.	19.411	81124.	15005.	18.497

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1941 NAT. INCOME	1941 INFOR-MATION	1941 %INFO	1942 NAT. INCOME	1942 INFOR-MATION	1942 %INFO	1943 NAT. INCOME	1943 INFOR-MATION	1943 %INFO
Agriculture	8401.	0.	0.0	12166.	0.	0.0	14398.	0.	0.0
Mining	2360.	0.	0.0	2588.	0.	0.0	2764.	0.	0.0
Construction	4219.	671.	15.900	6491.	1032.	15.900	5477.	871.	15.900
Manufacturing	33211.	2812.	8.468	45437.	3344.	7.359	58253.	4129.	7.089
Nondurable goods	14894.	1515.	11.750	16584.	1604.	9.669	19647.	1916.	9.752
Paper & allied products	1029.	256.	24.867	1123.	277.	24.689	1256.	308.	24.511
Printing,publish&allied inds	1375.	1259.	91.571	1445.	1326.	91.786	1748.	1608.	92.000
Nondurable manufacturing,nec	10490.	0.	0.0	14016.	0.	0.0	16643.	0.	0.0
Durable goods	20317.	1297.	6.386	28853.	1740.	6.031	38606.	2213.	5.733
Furniture	784.	91.	11.667	883.	102.	11.556	951.	109.	11.444
Machinery, exc electrical	3847.	350.	9.095	5396.	492.	9.126	5927.	543.	9.158
Electrical machinery	1697.	621.	32.742	2475.	829.	33.489	3357.	1149.	34.237
Instruments	0.	0.	79.000	0.	0.	79.000	0.	0.	79.000
Misc manufacturing	895.	235.	26.250	1209.	317.	26.200	1577.	412.	26.150
Durable manufacturing,nec	12694.	0.	0.0	18890.	0.	0.0	26794.	0.	0.0
Transportation	6302.	0.	0.0	8604.	0.	0.0	10791.	0.	0.0
Communication	1237.	1237.	100.000	1474.	1474.	100.000	1683.	1683.	100.000
Electric,gas&sanitary services	2072.	0.	0.0	2187.	0.	0.0	2243.	0.	0.0
Wholesale & retail trade	17411.	1852.	10.638	20423.	1788.	8.755	23882.	2109.	8.830
Finance,insurance&real estate	9207.	3354.	36.432	10588.	3734.	35.271	11713.	4336.	37.021
Banking	1096.	1096.	100.000	1186.	1186.	100.000	1406.	1406.	100.000
Credit agencies	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Security & commodity brokers	148.	115.	77.600	105.	81.	77.600	209.	162.	77.600
Insurance carriers	903.	903.	100.000	983.	983.	100.000	1026.	1026.	100.000
Insurance agents	444.	444.	100.000	468.	468.	100.000	488.	488.	100.000
Real estate	6468.	648.	10.025	7626.	796.	10.438	8222.	892.	10.850
Holding companies	148.	148.	100.000	220.	220.	100.000	362.	362.	100.000
Services	8867.	3414.	38.498	10268.	3945.	38.418	11796.	4410.	37.388
Personal services	1492.	49.	3.825	1552.	62.	3.987	1899.	79.	4.150
Miscellaneous business services	838.	328.	39.125	941.	419.	44.537	1075.	537.	49.950
Miscellaneous repair services	350.	38.	10.875	419.	46.	10.962	610.	67.	11.050
Motion pictures	513.	513.	100.000	652.	652.	100.000	830.	830.	100.000
Amusements & recreation	368.	27.	7.300	388.	29.	7.350	436.	32.	7.400
Medical & health services	1575.	480.	30.500	1806.	526.	29.100	1988.	549.	27.600
Legal services	763.	763.	100.000	793.	793.	100.000	814.	814.	100.000
Education services	439.	439.	100.000	461.	461.	100.000	503.	503.	100.000
Nonprofit membership organizations	640.	512.	80.000	716.	573.	80.000	819.	655.	80.000
Miscellaneous professional services	264.	264.	100.000	385.	385.	100.000	344.	344.	100.000
Services, nec	1825.	0.	0.0	2155.	0.	0.0	2478.	0.	0.0
Government and government enterprises	10500.	4088.	38.931	16332.	6033.	36.940	27037.	8493.	31.412
Federal	5835.	2082.	35.678	11563.	3982.	34.436	22038.	6348.	28.805
General government	5027.	1463.	29.100	10645.	3279.	30.800	20899.	5476.	26.200
Government enterprises	808.	619.	76.600	918.	703.	76.600	1139.	872.	76.600
State and local	4665.	2006.	43.000	4769.	2051.	43.011	4999.	2145.	42.908
General government	4388.	2006.	45.714	4473.	2051.	45.857	4663.	2145.	46.000
Rest of the world	277.	0.	0.0	296.	0.	0.0	336.	0.	0.0
	363.	0.	0.0	365.	0.	0.0	367.	0.	0.0
Private Sector	93650.	13340.	14.245	120591.	15317.	12.702	143367.	17538.	12.233
All industries, TOTAL	104150.	17428.	16.734	136923.	21350.	15.593	170404.	26031.	15.276

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1944 NAT. INCOME	1944 INFOR-MATION	1944 %INFO	1945 NAT. INCOME	1945 INFOR-MATION	1945 %INFO	1946 NAT. INCOME	1946 INFOR-MATION	1946 %INFO
Agriculture	14495.	0.	0.0	15204.	0.	0.0	18237.	0.	0.0
Mining	2980.	0.	0.0	2794.	0.	0.0	3011.	0.	0.0
Construction	4146.	659.	15.900	4292.	682.	15.900	6498.	1033.	15.900
Manufacturing	60331.	4575.	7.583	52186.	4486.	8.597	49134.	4816.	9.802
Nondurable goods	21006.	2200.	10.472	21222.	2389.	11.258	24864.	2917.	11.734
Paper & allied products	1347.	328.	24.333	1339.	323.	24.156	1716.	411.	23.978
Printing,publish&allied inds	2030.	1872.	92.214	2235.	2066.	92.429	2705.	2506.	92.643
Nondurable manufacturing,nec	17629.	0.	0.0	17648.	0.	0.0	20443.	0.	0.0
Durable goods	39325.	2375.	6.040	30964.	2097.	6.773	24270.	1899.	7.823
Furniture	1028.	117.	11.333	1052.	118.	11.222	1369.	152.	11.111
Machinery, exc electrical	5819.	535.	9.189	5087.	469.	9.221	4767.	441.	9.253
Electrical machinery	3720.	1301.	34.984	3056.	1092.	35.732	2385.	870.	36.479
Instruments	0.	0.	79.000	0.	0.	79.000	0.	0.	79.000
Misc manufacturing	1619.	423.	26.100	1605.	418.	26.050	1675.	435.	26.000
Durable manufacturing,nec	27139.	0.	0.0	20164.	0.	0.0	14074.	0.	0.0
Transportation	11243.	0.	0.0	10536.	0.	0.0	10341.	0.	0.0
Communication	1822.	1822.	100.000	1929.	1929.	100.000	2182.	2182.	100.000
Electric,gas&sanitary services	2227.	0.	0.0	2290.	0.	0.0	2614.	0.	0.0
Wholesale & retail trade	25768.	2443.	9.481	28010.	2855.	10.193	34604.	3676.	10.624
Finance,insurance&real estate	12312.	4636.	37.654	12987.	5026.	38.700	15540.	6217.	40.009
Banking	1658.	1658.	100.000	1824.	1824.	100.000	2228.	2228.	100.000
Credit agencies	0.	0.	100.000	0.	0.	100.000	0.	0.	100.000
Security & commodity brokers	223.	173.	77.600	388.	301.	77.600	394.	306.	77.600
Insurance carriers	1028.	1028.	100.000	1021.	1021.	100.000	1397.	1397.	100.000
Insurance agents	529.	529.	100.000	568.	568.	100.000	750.	750.	100.000
Real estate	8594.	968.	11.262	8915.	1041.	11.675	10504.	1270.	12.087
Holding companies	280.	280.	100.000	271.	271.	100.000	267.	267.	100.000
Services	13158.	4865.	36.973	14128.	5218.	36.934	16670.	6398.	38.380
Personal services	2015.	87.	4.312	2121.	95.	4.475	2561.	119.	4.637
Miscellaneous business services	1190.	659.	55.362	1255.	763.	60.775	1573.	1041.	66.188
Miscellaneous repair services	701.	78.	11.137	703.	79.	11.225	837.	95.	11.312
Motion pictures	882.	882.	100.000	929.	929.	100.000	1128.	1128.	100.000
Amusements & recreation	507.	38.	7.450	613.	46.	7.500	815.	62.	7.550
Medical & health services	2341.	663.	28.300	2459.	686.	27.900	3025.	904.	29.900
Legal services	874.	874.	100.000	930.	930.	100.000	957.	957.	100.000
Education services	532.	532.	100.000	569.	569.	100.000	658.	658.	100.000
Nonprofit membership organizations	916.	733.	80.000	983.	786.	80.000	1193.	954.	80.000
Miscellaneous professional services	320.	320.	100.000	335.	335.	100.000	480.	480.	100.000
Services, nec	2880.	0.	0.0	3231.	0.	0.0	3443.	0.	0.0
Government and government enterprises	33716.	10083.	29.905	36764.	11662.	31.722	22699.	8175.	36.015
Federal	28438.	7804.	27.443	31034.	9177.	29.570	16100.	5307.	32.963
General government	27250.	6894.	25.300	29786.	8221.	27.600	14606.	4163.	28.500
Government enterprises	1188.	910.	76.600	1248.	956.	76.600	1494.	1144.	76.600
State and local	5278.	2279.	43.170	5730.	2486.	43.378	6599.	2868.	43.459
General government	4938.	2279.	46.143	5370.	2486.	46.288	6177.	2868.	46.429
Rest of the world	340.	0.	0.0	360.	0.	0.0	422.	0.	0.0
	423.	0.	0.0	369.	0.	0.0	571.	0.	0.0
Private Sector	148885.	19000.	12.762	144725.	20197.	13.955	159402.	24323.	15.259
All industries, TOTAL	182601.	29083.	15.927	181489.	31859.	17.554	182101.	32498.	17.846

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1947 NAT. INCOME	1947 INFOR-MATION	1947 %INFO	1948 NAT. INCOME	1948 INFOR-MATION	1948 %INFO	1949 NAT. INCOME	1949 INFOR-MATION	1949 %INFO
Agriculture	18861.	0.	0.0	22271.	0.	0.0	17349.	0.	0.0
Mining	4241.	0.	0.0	5447.	0.	0.0	4552.	0.	0.0
Construction	8425.	1340.	15.900	10696.	1701.	15.900	10612.	1755.	16.533
Manufacturing	59498.	5868.	9.863	68795.	6894.	10.021	64844.	6846.	10.558
Nondurable goods	28035.	3371.	12.024	32911.	3684.	11.195	30556.	3779.	12.368
Paper & allied products	2221.	529.	23.800	2353.	560.	23.800	2184.	511.	23.411
Printing,publish&allied inds	3061.	2842.	92.857	3357.	3124.	93.071	3503.	3268.	93.286
Nondurable manufacturing,nec	22753.	0.	0.0	27201.	0.	0.0	24869.	0.	0.0
Durable goods	31461.	2497.	7.938	35884.	3210.	8.945	34288.	3067.	8.945
Furniture	1524.	168.	11.000	1193.	131.	11.000	1166.	129.	11.056
Machinery, exc electrical	6217.	577.	9.284	6329.	590.	9.316	5754.	538.	9.347
Electrical machinery	3463.	1289.	37.226	4031.	1531.	37.974	3794.	1469.	38.721
Instruments	0.	0.	79.000	1038.	820.	79.000	1018.	805.	79.056
Misc manufacturing	1782.	463.	26.000	1606.	138.	8.600	1465.	126.	8.622
Durable manufacturing,nec	18475.	0.	0.0	21687.	0.	0.0	21091.	0.	0.0
Transportation	11594.	0.	0.0	12809.	0.	0.0	12066.	0.	0.0
Communication	2300.	2300.	100.000	2820.	2820.	100.000	3036.	3036.	100.000
Electric,gas&sanitary services	2791.	0.	0.0	3176.	0.	0.0	3652.	0.	0.0
Wholesale & retail trade	37551.	4088.	10.887	39877.	4042.	10.136	39049.	4373.	11.198
Finance,insurance&real estate	16193.	6261.	38.666	19083.	6973.	36.541	20469.	7740.	37.815
Banking	2310.	2310.	100.000	2541.	2541.	100.000	2703.	2703.	100.000
Credit agencies	0.	0.	100.000	-157.	-157.	100.000	-171.	-171.	100.000
Security & commodity brokers	217.	168.	77.600	292.	227.	77.600	311.	241.	77.600
Insurance carriers	1468.	1468.	100.000	1919.	1919.	100.000	2342.	2342.	100.000
Insurance agents	658.	858.	100.000	677.	677.	100.000	701.	701.	100.000
Real estate	11495.	1412.	12.500	13765.	1721.	12.500	14564.	1905.	13.080
Holding companies	45.	45.	100.000	46.	46.	100.000	19.	19.	100.000
Services	18093.	7067.	39.059	19976.	7864.	39.367	20410.	8219.	40.268
Personal services	2640.	127.	4.800	2842.	136.	4.800	2912.	146.	5.000
Miscellaneous business services	1654.	1184.	71.600	1436.	1028.	71.600	1471.	1050.	71.360
Miscellaneous repair services	934.	106.	11.400	704.	80.	11.400	651.	84.	12.880
Motion pictures	1045.	1045.	100.000	903.	903.	100.000	886.	886.	100.000
Amusements & recreation	796.	60.	7.600	831.	63.	7.600	804.	65.	8.060
Medical & health services	3542.	1063.	30.000	3921.	1223.	31.200	4040.	1236.	30.600
Legal services	1036.	1036.	100.000	1176.	1176.	100.000	1257.	1257.	100.000
Education services	810.	810.	100.000	944.	944.	100.000	1010.	1010.	100.000
Nonprofit membership organizations	1308.	1046.	80.000	1462.	1170.	80.000	1652.	1322.	80.000
Miscellaneous professional services	589.	589.	100.000	1140.	1140.	100.000	1164.	1164.	100.000
Services, nec	3739.	0.	0.0	4617.	0.	0.0	4563.	0.	0.0
Government and government enterprises	18699.	7023.	37.559	19747.	7688.	38.932	22005.	8416.	38.248
Federal	10863.	3614.	33.270	10586.	3707.	35.021	11856.	3992.	33.672
General government	9395.	2490.	26.500	8910.	2424.	27.200	9999.	2570.	25.700
Government enterprises	1468.	1124.	76.600	1676.	1284.	76.600	1857.	1422.	76.600
State and local	7836.	3409.	43.505	9161.	3981.	43.451	10149.	4424.	43.593
General government	7320.	3409.	46.571	8521.	3981.	46.714	9442.	4424.	46.857
Government enterprises	516.	0.	0.0	640.	0.	0.0	707.	0.	0.0
Rest of the world	824.	0.	0.0	1163.	0.	0.0	1145.	0.	0.0
Private Sector	180369.	26924.	14.927	206113.	30294.	14.698	197184.	31968.	16.212
All industries, TOTAL	199068.	33947.	17.053	225860.	37982.	16.816	219189.	40385.	18.425

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1950 NAT. INCOME	1950 INFOR-MATION	1950 %INFO	1951 NAT. INCOME	1951 INFOR-MATION	1951 %INFO	1952 NAT. INCOME	1952 INFOR-MATION	1952 %INFO
Agriculture	18290.	0.	0.0	29994.	0.	0.0	20035.	0.	0.0
Mining	5259.	0.	0.0	5753.	0.	0.0	5513.	0.	0.0
Construction	11972.	2055.	17.167	14183.	2525.	17.800	15306.	2724.	17.800
Manufacturing	76296.	7907.	10.363	90318.	9237.	10.227	92605.	10059.	10.863
Nondurable goods	33384.	4074.	12.211	38412.	4449.	11.583	38259.	4635.	12.114
Paper & allied products	2706.	623.	23.022	3386.	766.	22.633	3151.	701.	22.244
Printing,publish&allied inds	3691.	3451.	93.500	3930.	3683.	93.714	4188.	3934.	93.929
Nondurable manufacturing,nec	26967.	0.	0.0	31096.	0.	0.0	30920.	0.	0.0
Durable goods	42932.	3833.	8.927	51906.	4788.	9.224	54346.	5425.	9.982
Furniture	1403.	156.	11.111	1538.	172.	11.167	1604.	180.	11.222
Machinery, exc electrical	6619.	621.	9.379	9140.	860.	9.411	9962.	941.	9.442
Electrical machinery	4823.	1904.	39.468	5758.	2316.	40.216	6584.	2697.	40.963
Instruments	1268.	1003.	79.111	1619.	1282.	79.167	1827.	1447.	79.222
Misc manufacturing	1726.	149.	8.644	1829.	159.	8.667	1839.	160.	8.689
Durable manufacturing,nec	27093.	0.	0.0	32022.	0.	0.0	32530.	0.	0.0
Transportation	13380.	0.	0.0	14962.	0.	0.0	15509.	0.	0.0
Communication	3347.	3347.	100.000	3868.	3868.	100.000	4283.	4283.	100.000
Electric,gas&sanitary services	3912.	0.	0.0	4551.	0.	0.0	5053.	0.	0.0
Wholesale & retail trade	40950.	4527.	11.056	45100.	4730.	10.487	46694.	5121.	10.968
Finance,insurance&real estate	22811.	8433.	36.969	24932.	9371.	37.586	27421.	10562.	38.516
Banking	3035.	3035.	100.000	3483.	3483.	100.000	3818.	3818.	100.000
Credit agencies	-313.	-313.	100.000	-371.	-371.	100.000	-393.	-393.	100.000
Security & commodity brokers	415.	322.	77.600	428.	332.	77.600	444.	345.	77.600
Insurance carriers	2205.	2205.	100.000	2269.	2269.	100.000	2628.	2628.	100.000
Insurance agents	824.	824.	100.000	938.	938.	100.000	1084.	1084.	100.000
Real estate	16545.	2260.	13.660	18033.	2568.	14.240	19676.	2916.	14.820
Holding companies	100.	100.	100.000	152.	152.	100.000	164.	164.	100.000
Services	21702.	8756.	40.345	23473.	9607.	40.927	24983.	10383.	41.558
Personal services	3024.	157.	5.200	3167.	171.	5.400	3281.	184.	5.600
Miscellaneous business services	1680.	1195.	71.120	1941.	1376.	70.880	2199.	1553.	70.640
Miscellaneous repair services	667.	96.	14.360	752.	119.	15.840	815.	141.	17.320
Motion pictures	867.	867.	100.000	878.	878.	100.000	870.	870.	100.000
Amusements & recreation	789.	67.	8.520	821.	74.	8.980	881.	83.	9.440
Medical & health services	4407.	1287.	29.200	4823.	1346.	27.900	5269.	1428.	27.100
Legal services	1344.	1344.	100.000	1455.	1455.	100.000	1515.	1515.	100.000
Education services	1078.	1078.	100.000	1139.	1139.	100.000	1189.	1189.	100.000
Nonprofit membership organizations	1766.	1413.	80.000	1932.	1546.	80.000	2054.	1643.	80.000
Miscellaneous professional services	1252.	1252.	100.000	1504.	1504.	100.000	1776.	1776.	100.000
Services, nec	4828.	0.	0.0	5061.	0.	0.0	5134.	0.	0.0
Government and government enterprises	23574.	9030.	38.307	30396.	10960.	36.056	34650.	12460.	35.960
Federal	12669.	4262.	33.644	18377.	5698.	31.009	21342.	6667.	31.237
General government	10734.	2780.	25.900	16237.	4059.	25.000	18909.	4803.	25.400
Government enterprises	1935.	1482.	76.600	2140.	1639.	76.600	2433.	1864.	76.600
State and local	10905.	4768.	43.724	12019.	5261.	43.774	13308.	5793.	43.534
General government	10145.	4768.	47.000	11160.	5261.	47.163	12252.	5793.	47.286
Government enterprises	760.	0.	0.0	859.	0.	0.0	1056.	0.	0.0
Rest of the world	1333.	0.	0.0	1529.	0.	0.0	1473.	0.	0.0
Private Sector	219252.	35025.	15.975	258663.	39337.	15.208	258875.	43132.	16.661
All industries, TOTAL	242826.	44055.	18.143	289059.	50297.	17.400	293525.	55592.	18.940

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1953 NAT. INCOME	1953 INFOR-MATION	1953 %INFO	1954 NAT. INCOME	1954 INFOR-MATION	1954 %INFO	1955 NAT. INCOME	1955 INFOR-MATION	1955 %INFO
Agriculture	17916.	0.	0.0	17132.	0.	0.0	16104.	0.	0.0
Mining	5459.	0.	0.0	5271.	0.	0.0	5901.	0.	0.0
Construction	15701.	2936.	18.700	15690.	2934.	18.700	16757.	3167.	18.900
Manufacturing	100501.	10954.	10.899	94708.	10834.	11.439	107976.	11755.	10.886
Nondurable goods	40332.	4999.	12.394	39719.	5181.	13.044	44046.	5666.	12.864
Paper & allied products	3337.	729.	21.856	3410.	732.	21.467	3810.	803.	21.078
Printing,publish&allied inds	4535.	4269.	94.143	4715.	4449.	94.357	5142.	4863.	94.571
Nondurable manufacturing,nec	32460.	0.	0.0	31594.	0.	0.0	35094.	0.	0.0
Durable goods	60169.	5955.	9.897	54989.	5653.	10.280	63930.	6089.	9.524
Furniture	1618.	182.	11.278	1558.	177.	11.333	1808.	206.	11.389
Machinery, exc electrical	10048.	952.	9.474	9140.	869.	9.505	9430.	899.	9.537
Electrical machinery	7331.	3058.	41.711	6686.	2840.	42.458	7123.	3078.	43.205
Instruments	2009.	1593.	79.278	2021.	1603.	79.333	2171.	1724.	79.389
Misc manufacturing	1955.	170.	8.711	1888.	165.	8.733	2084.	182.	8.756
Durable manufacturing,nec	37208.	0.	0.0	33694.	0.	0.0	41314.	0.	0.0
Transportation	15861.	0.	0.0	14639.	0.	0.0	15962.	0.	0.0
Communication	4761.	4761.	100.000	5065.	5065.	100.000	5660.	5660.	100.000
Electric,gas&sanitary services	5435.	0.	0.0	5928.	0.	0.0	6222.	0.	0.0
Wholesale & retail trade	47285.	5306.	11.221	48271.	5701.	11.810	52.96.	6091.	11.647
Finance,insurance&real estate	30307.	11952.	39.437	33053.	13074.	39.555	35307.	13948.	39.504
Banking	4230.	4230.	100.000	4465.	4465.	100.000	4775.	4775.	100.000
Credit agencies	-414.	-414.	100.000	-341.	-341.	100.000	-383.	-383.	100.000
Security & commodity brokers	476.	369.	77.600	682.	529.	77.600	805.	625.	77.600
Insurance carriers	3085.	3085.	100.000	3297.	3297.	100.000	3256.	3256.	100.000
Insurance agents	1192.	1192.	100.000	1330.	1330.	100.000	1372.	1372.	100.000
Real estate	21570.	3322.	15.400	23435.	3609.	15.400	25233.	4054.	16.067
Holding companies	168.	168.	100.000	185.	185.	100.000	249.	249.	100.000
Services	26743.	11228.	41.986	27687.	11790.	42.581	31053.	13248.	42.661
Personal services	3421.	198.	5.800	3505.	203.	5.800	3665.	211.	5.767
Miscellaneous business services	2478.	1745.	70.400	2663.	1875.	70.400	3003.	2189.	72.900
Miscellaneous repair services	838.	158.	18.800	826.	155.	18.800	877.	173.	19.767
Motion pictures	850.	850.	100.000	955.	955.	100.000	981.	981.	100.000
Amusements & recreation	985.	98.	9.900	1040.	103.	9.900	1122.	122.	10.833
Medical & health services	5798.	1560.	26.900	5871.	1391.	23.700	7093.	1731.	24.400
Legal services	1606.	1606.	100.000	1758.	1758.	100.000	1926.	1926.	100.000
Education services	1267.	1267.	100.000	1370.	1370.	100.000	1488.	1488.	100.000
Nonprofit membership organizations	2267.	1814.	80.000	2441.	1953.	80.000	2628.	2102.	80.000
Miscellaneous professional services	1934.	1934.	100.000	2026.	2026.	100.000	2324.	2324.	100.000
Services, nec	5299.	0.	0.0	5232.	0.	0.0	5946.	0.	0.0
Government and government enterprises	35487.	12950.	36.493	36075.	13550.	37.560	38056.	14605.	38.379
Federal	21015.	6636.	31.530	20190.	6558.	32.480	20945.	7049.	33.655
General government	18608.	4782.	25.700	17780.	4712.	26.500	18357.	5067.	27.600
Government enterprises	2407.	1844.	76.600	2410.	1846.	76.600	2588.	1982.	76.600
State and local	14472.	6324.	43.699	15885.	6992.	44.017	17111.	7557.	44.162
General government	13334.	6324.	47.429	14698.	6992.	47.571	15837.	7557.	47.714
Government enterprises	1138.	0.	0.0	1187.	0.	0.0	1274.	0.	0.0
Rest of the world	1528.	0.	0.0	1809.	0.	0.0	1979.	0.	0.0
Private Sector	271497.	47137.	17.362	269253.	49398.	18.346	295217.	53868.	18.247
All industries, TOTAL	306984.	60088.	19.574	305328.	62947.	20.616	333273.	68473.	20.546

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1956 NAT. INCOME	1956 INFOR-MATION	1956 %INFO	1957 NAT. INCOME	1957 INFOR-MATION	1957 %INFO	1958 NAT. INCOME	1958 INFOR-MATION	1958 %INFO
Agriculture	16109.	0.	0.0	16240.	0.	0.0	18610.	0.	0.0
Mining	6588.	0.	0.0	6536.	0.	0.0	5730.	0.	0.0
Construction	18649.	3562.	19.100	19405.	3745.	19.300	18891.	3646.	19.300
Manufacturing	113175.	13014.	11.499	116348.	13760.	11.826	107900.	13331.	12.355
Nondurable goods	46253.	6087.	13.161	46375.	6351.	13.695	45771.	6276.	13.706
Paper & allied products	4299.	889.	20.689	4124.	837.	20.300	4084.	829.	20.300
Printing,publish&allied inds	5484.	5198.	94.786	5804.	5514.	95.000	5731.	5444.	95.000
Nondurable manufacturing,nec	36470.	0.	0.0	36447.	0.	0.0	35956.	0.	0.0
Durable goods	66922.	6926.	10.350	69973.	7409.	10.588	62129.	7057.	11.359
Furniture	1929.	221.	11.444	1939.	223.	11.500	1804.	207.	11.500
Machinery, exc electrical	11368.	1088.	9.568	11529.	1107.	9.600	9894.	950.	9.600
Electrical machinery	7967.	3502.	43.953	8721.	3898.	44.700	8400.	3755.	44.700
Instruments	2426.	1926.	79.444	2503.	1990.	79.500	2463.	1958.	79.500
Misc manufacturing	2173.	191.	8.778	2170.	191.	8.800	2127.	187.	8.800
Durable manufacturing,nec	41063.	0.	0.0	43111.	0.	0.0	37441.	0.	0.0
Transportation	17005.	0.	0.0	17446.	0.	0.0	16545.	0.	0.0
Communication	6159.	6159.	100.000	6657.	6657.	100.000	7014.	7014.	100.000
Electric,gas&sanitary services	6643.	0.	0.0	7000.	0.	0.0	7450.	0.	0.0
Wholesale & retail trade	54844.	6535.	11.916	57292.	7104.	12.399	58369.	7243.	12.410
Finance,insurance&real estate	37235.	14923.	40.078	39779.	16162.	40.630	42852.	17608.	41.091
Banking	5361.	5361.	100.000	5750.	5750.	100.000	6017.	6017.	100.000
Credit agencies	-466.	-466.	100.000	-457.	-457.	100.000	-596.	-596.	100.000
Security & commodity brokers	866.	672.	77.600	935.	726.	77.600	1192.	925.	77.600
Insurance carriers	3058.	3058.	100.000	3227.	3227.	100.000	3979.	3979.	100.000
Insurance agents	1513.	1513.	100.000	1635.	1635.	100.000	1740.	1740.	100.000
Real estate	26563.	4445.	16.733	28338.	4931.	17.400	30238.	5261.	17.400
Holding companies	340.	340.	100.000	351.	351.	100.000	282.	282.	100.000
Services	33816.	14809.	43.794	36375.	16290.	44.783	38339.	17174.	44.796
Personal services	3921.	225.	5.733	4200.	239.	5.700	4241.	242.	5.700
Miscellaneous business services	3484.	2627.	75.400	3834.	2987.	77.900	4096.	3191.	77.900
Miscellaneous repair services	978.	203.	20.733	1042.	226.	21.700	987.	214.	21.700
Motion pictures	951.	951.	100.000	900.	900.	100.000	827.	827.	100.000
Amusements & recreation	1197.	141.	11.767	1236.	157.	12.700	1377.	175.	12.700
Medical & health services	7526.	1889.	25.100	8272.	2060.	24.900	9068.	2294.	25.300
Legal services	1979.	1979.	100.000	2131.	2131.	100.000	2232.	2232.	100.000
Education services	1685.	1685.	100.000	1847.	1847.	100.000	1999.	1999.	100.000
Nonprofit membership organizations	2825.	2260.	80.000	3070.	2456.	80.000	3337.	2670.	80.000
Miscellaneous professional services	2850.	2850.	100.000	3287.	3287.	100.000	3331.	3331.	100.000
Services, nec	6420.	0.	0.0	6556.	0.	0.0	6844.	0.	0.0
Government and government enterprises	40650.	15753.	38.753	43407.	17118.	39.437	46864.	18885.	40.297
Federal	21719.	7320.	33.703	22481.	7730.	34.387	23792.	8527.	35.842
General government	18975.	5218.	27.500	19567.	5498.	28.100	20545.	6040.	29.400
Government enterprises	2744.	2102.	76.600	2914.	2232.	76.600	3247.	2487.	76.600
State and local	18931.	8433.	44.545	20926.	9388.	44.862	23072.	10357.	44.892
General government	17621.	8433.	47.857	19558.	9388.	48.000	21578.	10357.	48.000
Government enterprises	1310.	0.	0.0	1368.	0.	0.0	1494.	0.	0.0
Rest of the world	2166.	0.	0.0	2301.	0.	0.0	2243.	0.	0.0
Private Sector	312367.	59002.	18.888	325379.	63718.	19.583	323943.	66017.	20.379
All industries, TOTAL	353037.	74755.	21.175	368786.	80836.	21.920	370807.	84902.	22.896

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1959 NAT. INCOME	1959 INFOR-MATION	1959 %INFO	1960 NAT. INCOME	1960 INFOR-MATION	1960 %INFO	1961 NAT. INCOME	1961 INFOR-MATION	1961 %INFO
Agriculture	16399.	0.	0.0	17468.	0.	0.0	18118.	0.	0.0
Mining	5468.	0.	0.0	5613.	0.	0.0	5607.	0.	0.0
Construction	20529.	3880.	18.900	20972.	3859.	18.400	21726.	3867.	17.800
Manufacturing	124163.	15528.	12.506	125448.	16327.	13.015	124698.	16902.	13.555
Nondurable goods	51243.	6901.	13.467	51818.	7281.	14.050	52532.	7425.	14.134
Paper & allied products	4629.	933.	20.150	4706.	941.	20.000	4887.	970.	19.850
Printing,publish&allied inds	6279.	5968.	95.050	6666.	6339.	95.100	6784.	6455.	95.150
Nondurable manufacturing,nec	40335.	0.	0.0	40446.	0.	0.0	40861.	0.	0.0
Durable goods	72920.	8627.	11.830	73630.	9047.	12.287	72166.	9477.	13.133
Furniture	2071.	241.	11.625	2098.	247.	11.750	2053.	244.	11.875
Machinery, exc electrical	11751.	1190.	10.125	11919.	1269.	10.650	11859.	1325.	11.175
Electrical machinery	10198.	4699.	46.075	10496.	4980.	47.450	10887.	5316.	48.825
Instruments	2881.	2291.	79.525	2948.	2345.	79.550	2989.	2378.	79.575
Misc manufacturing	2345.	206.	8.800	2332.	205.	8.800	2435.	214.	8.800
Durable manufacturing,nec	43674.	0.	0.0	43837.	0.	0.0	41943.	0.	0.0
Transportation	17889.	0.	0.0	18141.	0.	0.0	18252.	0.	0.0
Communication	7728.	7728.	100.000	8228.	8228.	100.000	8612.	8612.	100.000
Electric,gas&sanitary services	8140.	0.	0.0	8923.	0.	0.0	9331.	0.	0.0
Wholesale & retail trade	63423.	7733.	12.193	64737.	8235.	12.721	65743.	8413.	12.797
Finance,insurance&real estate	46296.	19254.	41.588	48608.	20487.	42.148	50792.	21335.	42.005
Banking	6637.	6637.	100.000	7255.	7255.	100.000	7322.	7322.	100.000
Credit agencies	-1022.	-1022.	100.000	-1076.	-1076.	100.000	-1324.	-1324.	100.000
Security & commodity brokers	1394.	1082.	77.600	1219.	946.	77.600	1675.	1300.	77.600
Insurance carriers	4559.	4559.	100.000	4816.	4816.	100.000	5055.	5055.	100.000
Insurance agents	1868.	1868.	100.000	2070.	2070.	100.000	2123.	2123.	100.000
Real estate	32469.	5739.	17.675	33940.	6092.	17.950	35563.	6481.	18.225
Holding companies	391.	391.	100.000	384.	384.	100.000	378.	378.	100.000
Services	42078.	19017.	45.195	44648.	20159.	45.151	47441.	21722.	45.787
Personal services	4470.	251.	5.625	4608.	256.	5.550	4796.	263.	5.475
Miscellaneous business services	4715.	3616.	76.700	5091.	3844.	75.500	5548.	4122.	74.300
Miscellaneous repair services	1009.	217.	21.475	1094.	232.	21.250	1170.	246.	21.025
Motion pictures	894.	894.	100.000	891.	891.	100.000	923.	923.	100.000
Amusements & recreation	1507.	171.	11.375	1662.	167.	10.050	1784.	156.	8.725
Medical & health services	10127.	2491.	24.600	10636.	2595.	24.400	11307.	2668.	23.600
Legal services	2612.	2612.	100.000	2695.	2695.	100.000	3064.	3064.	100.000
Education services	2195.	2195.	100.000	2419.	2419.	100.000	2696.	2696.	100.000
Nonprofit membership organizations	3756.	3005.	80.000	4176.	3341.	80.000	4531.	3625.	80.000
Miscellaneous professional services	3564.	3564.	100.000	3719.	3719.	100.000	3959.	3959.	100.000
Services, nec	7229.	0.	0.0	7657.	0.	0.0	7663.	0.	0.0
Government and government enterprises	49088.	19964.	40.671	52707.	21640.	41.057	56356.	23538.	41.766
Federal	24205.	8652.	35.746	25303.	8956.	35.395	26460.	9627.	36.382
General government	20862.	6092.	29.200	21676.	6178.	28.500	22594.	6665.	29.500
Government enterprises	3343.	2561.	76.600	3627.	2778.	76.600	3866.	2961.	76.600
State and local	24883.	11312.	45.461	27404.	12684.	46.285	29896.	13911.	46.532
General government	23133.	11312.	48.900	25470.	12684.	49.800	27934.	13911.	49.800
Government enterprises	1750.	0.	0.0	1934.	0.	0.0	1962.	0.	0.0
Rest of the world	2416.	0.	0.0	2477.	0.	0.0	3085.	0.	0.0
Private Sector	354529.	73139.	20.630	365263.	77295.	21.162	373405.	80852.	21.652
All industries, TOTAL	403617.	93104.	23.067	417970.	98935.	23.670	429761.	104389.	24.290

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1962 NAT. INCOME	1962 INFOR-MATION	1962 %INFO	1963 NAT. INCOME	1963 INFOR-MATION	1963 %INFO	1964 NAT. INCOME	1964 INFOR-MATION	1964 %INFO
Agriculture	18636.	0.	0.0	18463.	0.	0.0	17620.	0.	0.0
Mining	5433.	0.	0.0	5776.	0.	0.0	5987.	0.	0.0
Construction	23202.	4107.	17.700	24707.	4472.	18.100	27077.	4711.	17.400
Manufacturing	135999.	18503.	13.605	143189.	19182.	13.396	154081.	21159.	13.732
Nondurable goods	54958.	7755.	14.111	57224.	8084.	14.126	61324.	9013.	14.698
Paper & allied products	5088.	1002.	19.700	5264.	1037.	19.700	5579.	1149.	20.600
Printing,publish&allied inds	7093.	6753.	95.200	7398.	7047.	95.250	8252.	7864.	95.300
Nondurable manufacturing,nec	42777.	0.	0.0	44562.	0.	0.0	47493.	0.	0.0
Durable goods	81041.	10748.	13.263	85965.	11098.	12.910	92757.	12145.	13.093
Furniture	2261.	271.	12.000	2365.	284.	12.000	2584.	332.	12.833
Machinery, exc electrical	13448.	1573.	11.700	14099.	1650.	11.700	16052.	1996.	12.433
Electrical machinery	12109.	6079.	50.200	12309.	6179.	50.200	12759.	6694.	52.467
Instruments	3250.	2587.	79.600	3447.	2744.	79.600	3606.	2875.	79.733
Misc manufacturing	2528.	238.	9.400	2576.	242.	9.400	2670.	248.	9.300
Durable manufacturing,nec	47445.	0.	0.0	51169.	0.	0.0	55086.	0.	0.0
Transportation	19019.	0.	0.0	19943.	0.	0.0	21131.	0.	0.0
Communication	9291.	9291.	100.000	9889.	9889.	100.000	10602.	10602.	100.000
Electric,gas&sanitary services	9731.	0.	0.0	10333.	0.	0.0	10974.	0.	0.0
Wholesale & retail trade	69837.	8932.	12.776	72961.	9332.	12.790	79248.	10546.	13.308
Finance,insurance&real estate	53591.	22266.	41.537	56101.	22949.	40.906	59172.	24010.	40.577
Banking	7569.	7569.	100.000	7976.	7976.	100.000	8415.	8415.	100.000
Credit agencies	-1456.	-1456.	100.000	-1560.	-1560.	100.000	-1879.	-1879.	100.000
Security & commodity brokers	1276.	990.	77.600	1403.	1089.	77.600	1561.	1211.	77.600
Insurance carriers	5279.	5279.	100.000	5226.	5226.	100.000	5464.	5464.	100.000
Insurance agents	2310.	2310.	100.000	2446.	2446.	100.000	2727.	2727.	100.000
Real estate	38092.	7047.	18.500	40292.	7454.	18.500	42732.	7920.	18.533
Holding companies	521.	521.	100.000	320.	320.	100.000	152.	152.	100.000
Services	50863.	23479.	46.156	54239.	25234.	46.524	59156.	28262.	47.776
Personal services	5007.	270.	5.400	5255.	284.	5.400	5656.	322.	5.700
Miscellaneous business services	6112.	4468.	73.100	6648.	4860.	73.100	7493.	5680.	75.800
Miscellaneous repair services	1203.	250.	20.800	1304.	271.	20.800	1374.	275.	20.000
Motion pictures	890.	890.	100.000	916.	916.	100.000	1056.	1056.	100.000
Amusements & recreation	1833.	136.	7.400	1964.	145.	7.400	2104.	195.	9.267
Medical & health services	12285.	2973.	24.200	13150.	3195.	24.300	14604.	3797.	26.000
Legal services	3243.	3243.	100.000	3528.	3528.	100.000	3834.	3834.	100.000
Education services	3010.	3010.	100.000	3321.	3321.	100.000	3681.	3681.	100.000
Nonprofit membership organizations	4924.	3939.	80.000	5157.	4126.	80.000	5423.	4338.	80.000
Miscellaneous professional services	4300.	4300.	100.000	4588.	4588.	100.000	5084.	5084.	100.000
Services, nec	8062.	0.	0.0	8408.	0.	0.0	8847.	0.	0.0
Government and government enterprises	60550.	25753.	42.532	64747.	27842.	43.001	70127.	30481.	43.466
Federal	28115.	10178.	36.201	29565.	10920.	36.937	31680.	11791.	37.221
General government	24064.	7075.	29.400	25164.	7549.	30.000	27003.	8209.	30.400
Government enterprises	4051.	3103.	76.600	4401.	3371.	76.600	4677.	3583.	76.600
State and local	32435.	15575.	48.020	35182.	16921.	48.097	38447.	18690.	48.612
General government	30243.	15575.	51.500	32857.	16921.	51.500	35873.	18690.	52.100
Government enterprises	2192.	0.	0.0	2325.	0.	0.0	2574.	0.	0.0
Rest of the world	3570.	0.	0.0	3678.	0.	0.0	4350.	0.	0.0
Private Sector	399178.	86562.	21.685	419279.	91057.	21.718	449398.	99290.	22.094
All industries, TOTAL	459728.	112315.	24.431	484026.	118899.	24.565	519525.	129771.	24.979

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1965 NAT. INCOME	1965 INFOR-MATION	1965 %INFO	1966 NAT. INCOME	1966 INFOR-MATION	1966 %INFO	1967 NAT. INCOME	1967 INFOR-MATION	1967 %INFO
Agriculture	20366.	0.	0.0	21866.	0.	0.0	20694.	0.	0.0
Mining	6013.	0.	0.0	6229.	0.	0.0	6385.	0.	0.0
Construction	29840.	5401.	18.100	32653.	6008.	18.400	34105.	6412.	18.800
Manufacturing	170361.	24101.	14.147	189399.	28189.	14.883	193159.	29446.	15.245
Nondurable goods	65416.	9610.	14.691	72106.	10630.	14.742	74526.	11005.	14.766
Paper & allied products	6005.	1291.	21.500	6706.	1502.	22.400	6820.	1528.	22.400
Printing,publish&allied inds	8745.	8319.	95.350	9568.	9128.	95.400	9934.	9477.	95.400
Nondurable manufacturing,nec	50668.	0.	0.0	55832.	0.	0.0	57772.	0.	0.0
Durable goods	104945.	14491.	13.808	117293.	17559.	14.970	118633.	18442.	15.545
Furniture	2904.	397.	13.667	3190.	463.	14.500	3189.	462.	14.500
Machinery, exc electrical	18239.	2401.	13.167	21181.	2944.	13.900	21794.	3029.	13.900
Electrical machinery	14855.	8131.	54.733	17433.	9937.	57.000	18538.	10567.	57.000
Instruments	4128.	3297.	79.867	4908.	3926.	80.000	5103.	4082.	80.000
Misc manufacturing	2880.	265.	9.200	3178.	289.	9.100	3307.	301.	9.100
Durable manufacturing,nec	61939.	0.	0.0	67403.	0.	0.0	66702.	0.	0.0
Transportation	23069.	0.	0.0	24800.	0.	0.0	25203.	0.	0.0
Communication	11497.	11497.	100.000	12707.	12707.	100.000	13385.	13385.	100.000
Electric,gas&sanitary services	11442.	0.	0.0	12165.	0.	0.0	12659.	0.	0.0
Wholesale & retail trade	84662.	11261.	13.301	91335.	12191.	13.348	97643.	13054.	13.369
Finance,insurance&real estate	63987.	26304.	41.108	69826.	29580.	42.363	74477.	31920.	42.859
Banking	8943.	8943.	100.000	9774.	9774.	100.000	10726.	10726.	100.000
Credit agencies	-1617.	-1617.	100.000	-1678.	-1678.	100.000	-2155.	-2155.	100.000
Security & commodity brokers	1942.	1507.	77.600	2423.	1880.	77.600	3131.	2430.	77.600
Insurance carriers	5880.	5880.	100.000	6913.	6913.	100.000	7454.	7454.	100.000
Insurance agents	2957.	2957.	100.000	3193.	3193.	100.000	3295.	3295.	100.000
Real estate	45741.	8493.	18.567	48775.	9072.	18.600	51420.	9564.	18.600
Holding companies	141.	141.	100.000	426.	426.	100.000	606.	606.	100.000
Services	64142.	31279.	48.766	71391.	35232.	49.351	79096.	38415.	48.567
Personal services	5965.	358.	6.000	6536.	412.	6.300	6924.	436.	6.300
Miscellaneous business services	8399.	6593.	78.500	9561.	7764.	81.200	10655.	8652.	81.200
Miscellaneous repair services	1494.	287.	19.200	1696.	312.	18.400	1744.	321.	18.400
Motion pictures	1201.	1201.	100.000	1337.	1337.	100.000	1349.	1349.	100.000
Amusements & recreation	2201.	245.	11.133	2432.	316.	13.000	2574.	335.	13.000
Medical & health services	15790.	3995.	25.300	17553.	4248.	24.200	20172.	4700.	23.300
Legal services	4197.	4197.	100.000	4618.	4618.	100.000	5003.	5003.	100.000
Education services	4145.	4145.	100.000	4631.	4631.	100.000	5156.	5156.	100.000
Nonprofit membership organizations	5767.	4630.	80.000	6401.	5121.	80.000	6499.	5199.	80.000
Miscellaneous professional services	5629.	5629.	100.000	6474.	6474.	100.000	7264.	7264.	100.000
Services, nec	9334.	0.	0.0	10152.	0.	0.0	11756.	0.	0.0
Government and government enterprises	75374.	33059.	43.861	85036.	37156.	43.694	94250.	41303.	43.823
Federal	33303.	12352.	37.088	37921.	13643.	35.977	41493.	14904.	35.918
General government	28258.	8518.	30.100	32431.	9437.	29.100	35612.	10399.	29.200
Government enterprises	5005.	3834.	76.600	5490.	4205.	76.600	5881.	4505.	76.600
State and local	42071.	20708.	49.221	47115.	23513.	49.906	52757.	26399.	50.040
General government	39294.	20708.	52.700	44115.	23513.	53.300	49530.	26399.	53.300
Government enterprises	2777.	0.	0.0	3000.	0.	0.0	3227.	0.	0.0
Rest of the world	4681.	0.	0.0	4194.	0.	0.0	4561.	0.	0.0
Private Sector	490060.	109843.	22.414	536565.	123908.	23.093	561367.	132632.	23.627
All industries, TOTAL	565434.	142903.	25.273	621601.	161064.	25.911	655617.	173935.	26.530

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

INDUSTRY	1968 NAT. INCOME	1968 INFOR-MATION	1968 %INFO	1969 NAT. INCOME	1969 INFOR-MATION	1969 %INFO	1970 NAT. INCOME	1970 INFOR-MATION	1970 %INFO
Agriculture	21303.	0.	0.0	24066.	0.	0.0	24455.	0.	0.0
Mining	6785.	0.	0.0	6978.	0.	0.0	7810.	0.	0.0
Construction	37289.	7234.	19.400	41952.	8558.	20.400	43821.	8326.	19.000
Manufacturing	210811.	31695.	15.035	221353.	34076.	15.394	215388.	33421.	15.517
Nondurable goods	81286.	11885.	14.621	85525.	12882.	15.062	88088.	12938.	14.688
Paper & allied products	7486.	1619.	21.633	8132.	1697.	20.867	7968.	1602.	20.100
Printing,publish&allied inds	10760.	10265.	95.400	11724.	11185.	95.400	11883.	11336.	95.400
Nondurable manufacturing,nec	63040.	0.	0.0	65669.	0.	0.0	68237.	0.	0.0
Durable goods	129525.	19811.	15.295	135828.	21194.	15.604	127300.	20483.	16.090
Furniture	3497.	490.	14.000	3912.	528.	13.500	3715.	483.	13.000
Machinery, exc electrical	22862.	3418.	14.950	24559.	3929.	16.000	24353.	3896.	16.000
Electrical machinery	19694.	11107.	56.400	20753.	11580.	55.800	20132.	11234.	55.800
Instruments	5653.	4472.	79.100	6159.	4816.	78.200	5797.	4533.	78.200
Misc manufacturing	3579.	324.	9.067	3767.	340.	9.033	3740.	337.	9.000
Durable manufacturing,nec	74240.	0.	0.0	76678.	0.	0.0	69563.	0.	0.0
Transportation	27005.	0.	0.0	28797.	0.	0.0	30308.	0.	0.0
Communication	14563.	14563.	100.000	16344.	16344.	100.000	17600.	17600.	100.000
Electric,gas&sanitary services	13548.	0.	0.0	14371.	0.	0.0	14864.	0.	0.0
Wholesale & retail trade	106883.	14149.	13.238	115618.	15767.	13.637	122213.	16252.	13.298
Finance,insurance&real estate	81124.	35436.	43.681	86738.	38218.	44.061	92625.	41791.	45.118
Banking	12269.	12269.	100.000	15039.	15039.	100.000	16448.	16448.	100.000
Credit agencies	-2183.	-2183.	100.000	-2880.	-2880.	100.000	-1981.	-1981.	100.000
Security & commodity brokers	4042.	3175.	77.600	3461.	2686.	77.600	2733.	2121.	77.600
Insurance carriers	7735.	7735.	100.000	7960.	7960.	100.000	9269.	9269.	100.000
Insurance agents	3608.	3608.	100.000	3847.	3847.	100.000	4223.	4223.	100.000
Real estate	55036.	10264.	18.650	58727.	10982.	18.700	61812.	11590.	18.750
Holding companies	567.	567.	100.000	584.	584.	100.000	121.	121.	100.000
Services	86457.	41785.	48.330	95650.	46368.	48.477	103304.	49851.	48.257
Personal services	7246.	442.	6.100	7380.	435.	5.900	7436.	424.	5.700
Miscellaneous business services	11587.	9145.	78.925	13128.	10063.	76.650	14051.	10450.	74.375
Miscellaneous repair services	1884.	348.	18.450	2115.	391.	18.500	2149.	399.	18.550
Motion pictures	1514.	1514.	100.000	1473.	1473.	100.000	1581.	1581.	100.000
Amusements & recreation	2876.	345.	12.000	2959.	325.	11.000	3321.	332.	10.000
Medical & health services	22650.	5027.	22.000	26166.	5730.	21.900	29472.	6484.	22.000
Legal services	5296.	5296.	100.000	5829.	5829.	100.000	6691.	6691.	100.000
Education services	5677.	5677.	100.000	6249.	6249.	100.000	6688.	6688.	100.000
Nonprofit membership organizations	7448.	6117.	80.000	8590.	6872.	80.000	8912.	7130.	80.000
Miscellaneous professional services	7874.	7874.	100.000	9000.	9000.	100.000	9673.	9673.	100.000
Services, nec	12007.	0.	0.0	12761.	0.	0.0	13330.	0.	0.0
Government and government enterprises	105211.	46515.	44.211	114740.	51718.	45.074	127421.	58920.	46.240
Federal	45826.	16605.	36.235	48924.	18456.	37.724	53093.	21349.	40.210
General government	39273.	11586.	29.500	41801.	13000.	31.100	44723.	14937.	33.400
Government enterprises	6553.	5020.	76.600	7123.	5456.	76.600	8370.	6411.	76.600
State and local	59385.	29910.	50.366	65816.	33261.	50.537	74328.	37571.	50.547
General government	55906.	29910.	53.500	61939.	33261.	53.700	69964.	37571.	53.700
Government enterprises	3479.	0.	0.0	3877.	0.	0.0	4364.	0.	0.0
Rest of the world	4753.	0.	0.0	4464.	0.	0.0	4616.	0.	0.0
Private Sector	610521.	184861.	23.727	656331.	159330.	24.276	677004.	167240.	24.703
All industries, TOTAL	715732.	191376.	26.738	771071.	211048.	27.371	804425.	226160.	28.114

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 (*$ Millions Current*)

INDUSTRY	1971 NAT. INCOME	1971 INFOR-MATION	1971 %INFO	1972 NAT. INCOME	1972 INFOR-MATION	1972 %INFO	1973 NAT. INCOME	1973 INFOR-MATION	1973 %INFO
Agriculture	25682.	0.	0.0	30649.	0.	0.0	47756.	0.	0.0
Mining	7425.	0.	0.0	8700.	0.	0.0	10395.	0.	0.0
Construction	47771.	8790.	18.400	52277.	9044.	17.300	58327.	9682.	16.600
Manufacturing	224704.	33591.	14.949	251811.	37612.	14.937	281589.	42015.	14.921
Nondurable goods	91505.	13564.	14.824	97943.	14782.	15.093	106615.	16130.	15.129
Paper & allied products	8337.	1676.	20.100	9421.	1875.	19.900	11020.	2171.	19.700
Printing,publish&allied inds	12462.	11889.	95.400	13530.	12908.	95.400	14632.	13959.	95.400
Nondurable manufacturing,nec	70706.	0.	0.0	74992.	0.	0.0	80963.	0.	0.0
Durable goods	133199.	20027.	15.035	153868.	22830.	14.837	174974.	25885.	14.794
Furniture	3820.	457.	13.000	4526.	577.	12.750	4872.	609.	12.500
Machinery, exc electrical	23552.	3439.	14.600	27294.	4040.	14.800	31867.	4716.	14.800
Electrical machinery	20631.	11285.	54.700	23353.	12809.	54.850	26394.	14517.	55.000
Instruments	5800.	4443.	76.600	6457.	4991.	77.300	7186.	5605.	78.000
Misc manufacturing	4038.	363.	9.000	4586.	413.	9.000	4867.	438.	9.000
Durable manufacturing,nec	75358.	0.	0.0	87652.	0.	0.0	99788.	0.	0.0
Transportation	32964.	0.	0.0	36453.	0.	0.0	41565.	0.	0.0
Communication	18343.	18343.	100.000	20311.	20311.	100.000	21849.	21849.	100.000
Electric,gas&sanitary services	16271.	0.	0.0	17589.	0.	0.0	18773.	0.	0.0
Wholesale & retail trade	134866.	17833.	13.422	144606.	19761.	13.665	162599.	22273.	13.698
Finance,insurance&real estate	103113.	46034.	44.645	112493.	49504.	44.006	121170.	52799.	43.575
Banking	15960.	15960.	100.000	17074.	17074.	100.000	20431.	20431.	100.000
Credit agencies	-2269.	-2269.	100.000	-3381.	-3381.	100.000	-4580.	-4580.	100.000
Security & commodity brokers	4107.	3187.	77.600	4348.	3374.	77.600	3173.	2462.	77.600
Insurance carriers	11253.	11253.	100.000	12507.	12507.	100.000	12941.	12941.	100.000
Insurance agents	4744.	4744.	100.000	5217.	5217.	100.000	5677.	5677.	100.000
Real estate	69161.	13002.	18.800	76373.	14358.	18.800	83325.	15665.	18.800
Holding companies	157.	157.	100.000	355.	355.	100.000	203.	203.	100.000
Services	111220.	53358.	48.011	122344.	58870.	48.118	136891.	66938.	48.899
Personal services	7344.	404.	5.500	7471.	411.	5.500	7754.	434.	5.600
Miscellaneous business services	14729.	10620.	72.100	16551.	11933.	72.100	19410.	14558.	75.000
Miscellaneous repair services	2316.	431.	18.600	2557.	476.	18.600	2879.	538.	18.700
Motion pictures	1560.	1560.	100.000	1576.	1576.	100.000	1714.	1714.	100.000
Amusements & recreation	3485.	314.	9.000	3745.	337.	9.000	4378.	394.	9.000
Medical & health services	32569.	7133.	21.900	36586.	7756.	21.200	40825.	8532.	20.900
Legal services	7522.	7522.	100.000	8398.	8398.	100.000	9593.	9593.	100.000
Education services	7143.	7143.	100.000	8010.	8010.	100.000	8992.	8992.	100.000
Nonprofit membership organizations	10017.	8014.	80.000	10646.	8517.	80.000	11357.	9086.	80.000
Miscellaneous professional services	10259.	10259.	100.000	11456.	11456.	100.000	13097.	13097.	100.000
Services, nec	14276.	0.	0.0	15348.	0.	0.0	16892.	0.	0.0
Government and government enterprises	139047.	64774.	46.585	152489.	71192.	46.687	165791.	77749.	46.896
Federal	55654.	22523.	40.469	59724.	24073.	40.306	62416.	25169.	40.324
General government	46763.	15712.	33.600	50060.	16670.	33.300	51931.	17137.	33.000
Government enterprises	8891.	6811.	76.600	9664.	7403.	76.600	10485.	8032.	76.600
State and local	83393.	42252.	50.666	92765.	47119.	50.794	103375.	52580.	50.864
General government	78486.	42252.	53.833	87312.	47119.	53.967	97191.	52580.	54.100
Government enterprises	4907.	0.	0.0	5453.	0.	0.0	6184.	0.	0.0
Rest of the world	6614.	0.	0.0	7049.	0.	0.0	9043.	0.	0.0
Private Sector	726973.	177989.	24.484	804282.	195101.	24.258	909957.	215556.	23.689
All industries, TOTAL	866020.	242763.	28.032	956771.	266293.	27.832	1075748.	293305.	27.265

NATIONAL INCOME OF THE PRIMARY INFORMATION SECTOR BY INDUSTRY, 1929-1974 ($ Millions Current)

1974

INDUSTRY	NAT. INCOME	INFOR-MATION	%INFO
Agriculture	43772.	0.	0.0
Mining	13568.	0.	0.0
Construction	61051.	10562.	17.300
Manufacturing	294232.	42342.	14.391
Nondurable goods	118975.	16273.	13.678
Paper & allied products	10691.	2106.	19.700
Printing,publish&allied inds	14850.	14167.	95.400
Nondurable manufacturing,nec	93434.	0.	0.0
Durable goods	175257.	26069.	14.875
Furniture	4990.	624.	12.500
Machinery, exc electrical	33124.	4969.	15.000
Electrical machinery	26195.	14407.	55.000
Instruments	7227.	5637.	78.000
Misc manufacturing	4802.	432.	9.000
Durable manufacturing,nec	98919.	0.	0.0
Transportation	45140.	0.	0.0
Communication	23754.	23754.	100.000
Electric,gas&sanitary services	19987.	0.	0.0
Wholesale & retail trade	178525.	22108.	12.384
Finance,insurance&real estate	158590.	79646.	50.221
Banking	23936.	23936.	100.000
Credit agencies	-4422.	-4422.	100.000
Security & commodity brokers	31390.	24359.	77.600
Insurance carriers	13569.	13569.	100.000
Insurance agents	6336.	6336.	100.000
Real estate	88562.	16650.	18.800
Holding companies	-781.	-781.	100.000
Services	152703.	74617.	48.864
Personal services	8162.	457.	5.600
Miscellaneous business services	21383.	16042.	75.000
Miscellaneous repair services	3178.	594.	18.700
Motion pictures	1969.	1969.	100.000
Amusements & recreation	4762.	429.	9.000
Medical & health services	46842.	9743.	20.800
Legal services	10845.	10845.	100.000
Education services	10073.	10073.	100.000
Nonprofit membership organizations	12228.	5782.	80.000
Miscellaneous professional services	14683.	14683.	100.000
Services, nec	18572.	0.	0.0
Government and government enterprises	179969.	84641.	47.031
Federal	66456.	27060.	40.719
General government	54690.	18048.	33.000
Government enterprises	11766.	9013.	76.600
State and local	113513.	57580.	50.726
General government	106433.	57580.	54.100
Government enterprises	7080.	0.	0.0
Rest of the world	14403.	0.	0.0
Private Sector	1005743.	253029.	25.158
All industries, TOTAL	1185712.	337670.	28.478

TABLE 14: TWO SECTOR AGGREGATION OF THE U.S. LABOR FORCE

YEAR	EXPERIENCED CIVILIAN WORK FORCE: INCLUSIVE DEFINITION — INFORMATION WORKERS	INCLUSIVE DEFINITION — NON-INFORMATION WORKERS	RESTRICTIVE DEFINITION — INFORMATION WORKERS	RESTRICTIVE DEFINITION — NON-INFORMATION WORKERS	TOTAL U.S. LABOR FORCE
1860	580,040	7,706,243	372,883	7,913,400	8,286,283
1870	788,837	11,732,379	500,849	12,020,367	12,521,216
1880	1,340,292	16,066,092	887,726	16,518,658	17,406,384
1890	2,980,778	19,773,254	2,480,189	20,273,843	22,754,032
1900	4,286,395	24,872,754	3,120,029	26,039,120	29,159,149
1910	7,283,391	32,516,561	4,537,196	35,262,756	39,799,952
1920	9,963,456	35,324,982	6,023,362	39,265,076	45,288,438
1930	16,031,889	35,025,090	8,883,914	42,173,065	51,056,979
1940	16,470,313	37,112,067	9,883,428	43,698,952	53,582,380
1950	21,691,532	36,152,555	13,940,424	43,903,663	57,844,087
1960	30,851,510	36,954,008	19,256,767	48,548,751	67,805,518
1970	40,529,588	39,541,542	29,464,497	50,606,633	80,071,130
1980[a]	49,154,120	46,662,879	39,955,688	55,861,311	95,816,999

(BY PERCENT)

1860	7.0	93.0	4.5	95.5	100
1870	6.3	93.7	4.0	96.0	100
1880	7.7	92.3	5.1	94.9	100
1890	13.1	86.9	10.9	89.1	100
1900	14.7	85.3	10.7	89.3	100
1910	18.3	81.7	11.4	88.6	100
1920	22.0	78.0	13.3	86.7	100
1930	31.4	68.6	17.4	82.6	100
1940	30.7	69.3	18.4	81.6	100
1950	37.5	62.5	24.1	75.9	100
1960	45.5	54.5	28.4	71.6	100
1970	50.6	49.4	36.8	63.2	100
1980[a]	51.3	48.7	41.7	58.3	100

[a]BLS projection.

TABLE 15:

FOUR SECTOR AGGREGATION OF THE U.S. LABOR FORCE (MEDIAN DEFINITION)

EXPERIENCED CIVILIAN WORK FORCE

YEAR	INFORMATION SECTOR	AGRICULTURE SECTOR	INDUSTRY SECTOR	SERVICE SECTOR	TOTAL
1860	480,604	3,364,230	3,065,924	1,375,525	8,286,283
1870	601,018	5,884,971	4,006,789	2,028,438	12,521,216
1880	1,131,415	7,606,590	4,386,409	4,281,970	17,406,384
1890	2,821,500	8,464,500	6,393,883	5,074,149	22,754,032
1900	3,732,371	10,293,179	7,814,652	7,318,947	29,159,149
1910	5,930,193	12,377,785	14,447,382	7,044,592	39,799,952
1920	8,016,054	14,718,742	14,492,300	8,061,342	45,288,438
1930	12,508,959	10,415,623	18,023,113	10,109,284	51,056,979
1940	13,337,958	8,233,624	19,928,422	12,082,376	53,582,380
1950	17,815,978	6,883,446	22,154,285	10,990,378	57,844,087
1960	28,478,317	4,068,511	23,597,364	11,661,326	67,805,518
1970	37,167,513	2,466,883	22,925,095	17,511,639	80,071,130
1980[a]	44,650,721	2,012,157	21,558,824	27,595,297	95,816,999

(BY PERCENT)

1860	5.8	40.6	37.0	16.6	100
1870	4.8	47.0	32.0	16.2	100
1880	6.5	43.7	25.2	24.6	100
1890	12.4	37.2	28.1	22.3	100
1900	12.8	35.3	26.8	25.1	100
1910	14.9	31.1	36.3	17.7	100
1920	17.7	32.5	32.0	17.8	100
1930	24.5	20.4	35.3	19.8	100
1940	24.9	15.4	37.2	22.5	100
1950	30.8	11.9	38.3	19.0	100
1960	42.0	6.0	34.8	17.2	100
1970	46.4	3.1	28.6	21.9	100
1980[a]	46.6	2.1	22.5	28.8	100

[a]BLS projection.

APPENDIX SIX

This report contains the following backup information to Chapter 6 of Volume I:

(i) A detailed explanation of the results of an Input-Output experiment which reduced defense spending by 10% and increased personal consumption expenditures by an equal dollar amount (see Tables 16 through 23).

(ii) A table of the final demand components for a second experiment (see Table 24).

DETAILED RESULTS OF EXPERIMENT I

One reason for performing this experiment is to show the rich amount of detail that can be gleaned from the I-O matrix. In this section, a variety of reports are presented on both output and employment impacts. Remember that the 108-order matrix used here is itself a summary of the more complex underlying 507-order matrix. Hence, a user could take a microscopic look at the interactions within a subset of the economy, or pull back and take a very general look at structural relationships between the major sectors.

Table 16 shows the ten final demand components of the control (actual) 1967 economy. The experimental economy final demand is shown in Table 17, the essential changes being: (i) a reduction of $14,266 million in defense purchases, and (ii) a corresponding pro rata increase in all personal consumption expenditures. Note that the final demand vector which is multiplied through the inverse does not include the scrap industry (83), government wages (84), rest of world industry (85), household industry (86), and inventory valuation adjustment (87). Also, "defense" purchased $27,126 million in wages, and this amount is not reflected in the "total" column of Tables 16 and 17.

Each final demand component generates output in the private economy. Table 18 shows the total output "created" by each cell of the 108 by 11 final demand matrix. For example, personal consumption expenditures of radio, television, and communication equipment (Industry 56*) accounted directly and indirectly for $16,218 million output on final demand purchases of $12,792 million.

The direct and indirect impacts of final demand can be further decomposed, and Tables 19 and 20 show those data. Using Industry 56* as the example again, the $16,218 of total output is the sum of direct requirements (i.e., demand for Industry 56* output by consumers and by firms within the industry) and indirect requirements (i.e., purchases by other industries in satisfying the final demand for Industry 56*).

The direct outputs were $13,770, and the indirect outputs were $2,448. This particular industry was fairly self-contained, in that over 85% of its total output was generated completely within the industry. Other industries are structurally deeper in the economy. For example, only 5% of the primary iron and steel industry (I-O #37) output is generated by direct final demand. Rather, almost all of its demand is generated by intermediate purchases -- hence it is a "deep" sector. We shall pursue the question of structural depth in more detail later.

Since we are performing an experiment, comparing a "new" economy with a control economy, a report of net changes induced by the hypothetical policy is in order. Table 21 shows the total net effect of the policy. The total impact on the economy was a hefty $8,564 million gain in output -- the economy did very well indeed in switching from defense to personal consumption expenditures. The total net impact on the noninformation industries was a gain of $7,294 million; the information industries gained $1,267 million in net output. Some industries, as might be expected, suffered severe recessions. For example, the ordnance industry lost 14% of its total output, and the aircraft industry lost 10%. For discrete industries, these losses are traumatic. And for regions that are highly specialized in defense contracting, a 14% national loss in industry could reflect a 30% loss for a particular country's employment -- something that is catastrophic in the short run. Table 21 shows that the trade industry (69) fared quite well, absorbing $2.8 billion in margins on increased consumption of noninformation goods. Retail and wholesale establishments that trade in information goods (69*) also did very well, scoring a $383 million gain in output. People bought food (14), rented houses and apartments (71) and took out loans and insurance (70). The big noninformation industry losers were ordnance (13), and aircraft (60). And the big loser in the information sector was the radio, television, and communication equipment industry. Even though consumers bought new televisions and radio sets with their windfall income, it did not begin to compensate the huge loss in avionics gear cut out of the defense budget. Firms that diversified in both consumer and military electronics had a fair chance of surviving. Firms that were completely specialized in military communications were badly hurt.

The total net impacts can again be decomposed into direct and indirect effects. Tables 22 and 23 show those data broken down by final demand sector. All final demand sectors other than personal consumption and defense show a net impact of zero, as may be expected since they were untouched by the policy experiment.

DETAILED RESULTS OF EXPERIMENT II

To conserve space, none of the detailed results of Experiment II are shown. Available are the total, direct and indirect impacts on output and labor broken down by industry.

Table 24 shows the experimental final demand.

TABLE 16: FINAL DEMAND COMPONENTS OF THE CONTROL (ACTUAL) ECONOMY

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	12181.	0.	5674.	0.	15.	94.	225.	5430.	0.	266.	477.
12*) Maintenance & repair on info buildings	1424.	0.	0.	0.	0.	0.	186.	764.	150.	71.	252.
23*) Office furniture & equipment	943.	0.	649.	20.	11.	12.	32.	161.	4.	1.	54.
24*) Paper: printing (exc boxes)	366.	50.	0.	107.	82.	15.	23.	40.	16.	3.	29.
26*) Printing & publishing	5599.	4072.	0.	274.	244.	144.	32.	715.	11.	3.	105.
27*) Ink	17.	0.	0.	5.	10.	0.	1.	1.	0.	0.	0.
48*) Printing & paper machinery	785.	0.	613.	35.	114.	8.	9.	6.	0.	0.	0.
51*) Computers,calculators,office equip.	5023.	112.	3352.	155.	710.	242.	291.	119.	10.	1.	31.
53*) Electronic measuring instruments	1086.	0.	629.	20.	166.	208.	50.	2.	0.	1.	9.
56*) Radio, TV, comm'n equipment	13721.	3646.	2937.	600.	580.	5179.	657.	93.	3.	14.	11.
57*) Electronic components	1435.	171.	18.	139.	372.	617.	103.	4.	0.	8.	1.
58*) Misc electronic instruments	195.	0.	133.	7.	29.	9.	2.	2.	12.	0.	0.
62*) Mech measuring & control instruments	2201.	415.	615.	78.	461.	479.	83.	17.	34.	4.	15.
63*) Photographic & related equipment	2579.	713.	920.	78.	313.	340.	70.	65.	56.	4.	18.
64*) Advertising signs & displays	516.	204.	241.	18.	35.	1.	1.	23.	0.	-8.	1.
66*) Telecommunications, exc. radio & TV	10091.	7837.	1096.	0.	140.	405.	138.	136.	44.	43.	253.
67*) Radio, TV, CATV	7.	0.	0.	0.	0.	0.	0.	7.	0.	0.	0.
69*) Trade margin on info goods	15553.	13531.	1014.	101.	516.	230.	50.	25.	41.	12.	31.
70*) Finance & insurance: components	25113.	24596.	4.	-1.	90.	17.	36.	172.	39.	7.	151.
71*) Real estate:fees,royalties,office rentals	9170.	7842.	778.	0.	214.	48.	60.	62.	40.	9.	116.
72*) Repair: radio & TV equipment	1112.	1105.	0.	0.	0.	1.	-0.	2.	3.	1.	1.
73*) Misc business info services	7471.	4142.	0.	0.	408.	1254.	586.	830.	286.	66.	300.
76*) Motion pictures	2154.	1744.	0.	-57.	322.	109.	5.	24.	0.	2.	4.
77*) Medical, educational, nonprofit	23027.	20629.	0.	0.	0.	901.	1000.	101.	323.	32.	41.
78*) Postal service	1499.	1053.	0.	0.	14.	187.	46.	23.	65.	9.	101.
82*) Office Supplies	470.	0.	0.	0.	0.	99.	77.	143.	30.	14.	107.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	2018.	1811.	0.	129.	55.	5.	4.	1.	10.	1.	2.
2) Other agricultural products	6849.	3756.	0.	1031.	3184.	7.	-1202.	16.	9.	4.	43.
3) Forestry and fishery products	249.	449.	0.	2.	47.	5.	-259.	1.	2.	1.	1.
4) Agr., Forest, Fish Services	184.	136.	0.	0.	14.	10.	1.	16.	1.	1.	5.
5) Iron & ferroalloy ores mining	82.	0.	0.	25.	122.	-65.	-0.	0.	0.	0.	0.
6) Nonferrous metal ores mining	173.	0.	0.	12.	35.	58.	67.	0.	0.	0.	0.
7) Coal mining	618.	121.	0.	125.	306.	36.	7.	15.	1.	1.	4.
8) Crude petroleum and natural gas	339.	0.	0.	257.	82.	0.	0.	0.	0.	0.	0.
9) Stone & clay mining & quarrying	51.	4.	0.	12.	83.	-1.	-1.	0.	0.	0.	-46.
10) Chemical & fertilizer mineral min.	189.	2.	0.	8.	148.	-0.	0.	0.	0.	0.	31.
11) New construction, Net	67708.	0.	48664.	0.	0.	881.	2275.	746.	1708.	0.	13434.
12) Maintenance & repair construction	4271.	0.	0.	0.	0.	973.	294.	7.	0.	0.	2997.
13) Ordnance and accessories	9075.	322.	25.	147.	309.	6432.	1834.	0.	0.	7.	0.
14) Food & kindred products	64911.	60974.	0.	899.	1906.	206.	448.	68.	273.	73.	63.
15) Tobacco manufactures	6059.	5270.	0.	189.	601.	0.	0.	0.	0.	-1.	0.
16) Fabrics, yarn & thread mills	1058.	592.	0.	114.	250.	73.	1.	9.	17.	1.	1.
17) Misc. textile goods & floor cover.	1710.	1405.	89.	107.	89.	14.	6.	0.	0.	-1.	0.
18) Apparel	16867.	16246.	0.	281.	169.	96.	31.	2.	11.	28.	2.
19) Misc. fabricated textile products	2459.	1983.	0.	49.	74.	323.	13.	5.	12.	-5.	5.
20) Lumber, wood prod. exc. containers	787.	258.	7.	121.	367.	22.	8.	3.	0.	0.	0.
21) Wooden containers	30.	0.	0.	2.	3.	21.	3.	0.	0.	0.	0.
22) Household furniture	4183.	3861.	164.	49.	24.	26.	30.	21.	2.	2.	3.
23) Other furniture, fixtures, Net	1308.	174.	983.	20.	8.	28.	18.	73.	2.	-2.	4.
24) Paper, allied prod. exc containers, Net	2308.	1451.	0.	122.	567.	47.	31.	53.	13.	7.	16.
25) Paperboard containers, boxes	[illegible]	73.	0.	39.	24.	29.	5.	12.	6.	2.	1.

TABLE 16: FINAL DEMAND COMPONENTS OF THE CONTROL (ACTUAL) ECONOMY - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
26) Printing & publishing, Net	161.	47.	0.	23.	8.	36.	17.	5.	2.	1.	22.
27) Chemicals, select Chem products, Net	4367.	504.	0.	300.	1700.	1286.	464.	13.	31.	2.	65.
28) Plastics, synthetic materials	779.	18.	0.	26.	670.	65.	0.	0.	0.	0.	0.
29) Drugs, Cleaning, Toilet preparations	8669.	7293.	0.	221.	435.	121.	71.	145.	359.	5.	19.
30) Paints & allied products	160.	52.	0.	54.	47.	3.	1.	1.	2.	-2.	1.
31) Petroleum refining & related ind's	12870.	10194.	0.	541.	765.	939.	139.	146.	34.	33.	79.
32) Rubber & misc plastics products	3328.	2269.	30.	142.	323.	354.	37.	44.	41.	44.	43.
33) Leather tanning, ind. leather prods.	43.	0.	0.	-6.	43.	5.	2.	0.	0.	0.	0.
34) Footwear & other leather products	3718.	3659.	0.	21.	20.	14.	2.	0.	1.	2.	0.
35) Glass & glass products	573.	317.	0.	39.	145.	10.	8.	22.	29.	2.	0.
36) Stone & clay products	588.	244.	0.	127.	177.	23.	4.	9.	2.	1.	0.
37) Primary iron & steel manufacturing	1228.	3.	0.	514.	518.	286.	4.	0.	0.	2.	0.
38) Primary nonferrous metal manufacturing	1118.	15.	34.	336.	726.	42.	-34.	0.	0.	0.	0.
39) Metal containers	99.	0.	11.	61.	16.	13.	0.	0.	0.	0.	0.
40) Heating, plumbing & struc metal prods.	1632.	66.	933.	128.	284.	179.	43.	0.	0.	0.	0.
41) Stamping,screw mach. prods & bolts	886.	374.	0.	86.	274.	108.	31.	23.	2.	-14.	1.
42) Other fabricated metal products	2039.	774.	337.	198.	434.	226.	37.	27.	4.	-3.	5.
43) Engines and turbines	1752.	144.	735.	55.	393.	366.	49.	0.	0.	0.	9.
44) Farm machinery & equipment	3868.	38.	2942.	409.	419.	25.	3.	9.	2.	3.	15.
45) Const., mining & oil field machs.	4120.	0.	2428.	58.	1270.	295.	13.	0.	11.	0.	46.
46) Materials handling mach & equipment	1376.	0.	1108.	36.	132.	82.	17.	1.	0.	0.	0.
47) Metalworking mach & equipment	4376.	87.	3461.	167.	486.	116.	36.	14.	2.	0.	7.
48) Spec ind mach & equipment, Net	3380.	22.	2592.	56.	677.	24.	5.	5.	0.	0.	0.
49) General ind mach & equipment	2956.	0.	1888.	125.	627.	242.	60.	0.	0.	5.	7.
50) Machine shop products	336.	4.	5.	32.	63.	98.	8.	108.	14.	0.	2.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	2847.	404.	1729.	126.	359.	96.	7.	105.	14.	2.	3.
53) Elec ind equip & apparatus, Net	3387.	28.	2257.	113.	391.	471.	69.	16.	2.	0.	39.
54) Household appliances	3956.	3538.	127.	103.	149.	11.	3.	13.	9.	2.	0.
55) Electric lighting & wiring equip.	965.	557.	66.	57.	169.	35.	13.	55.	2.	3.	7.
56) Radio, television & comm. eqdip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc.elec machinery, Net	1086.	626.	76.	28.	132.	187.	25.	2.	1.	3.	6.
59) Motor vehicles & equipment	28276.	15822.	9054.	-310.	1976.	847.	155.	182.	27.	87.	435.
60) Aircraft and parts	14794.	50.	2367.	1918.	1809.	7840.	809.	0.	0.	2.	0.
61) Other transportation equipment	6475.	1078.	3430.	196.	206.	1327.	220.	0.	0.	10.	8.
62) Scientific & controlling instru.	1082.	185.	517.	31.	107.	107.	50.	7.	73.	2.	1.
63) Optical, ophthalmic&photo equip, Net	347.	317.	0.	0.	8.	15.	4.	0.	2.	0.	0.
64) Misc manufacturing, Net	5175.	4213.	291.	130.	297.	57.	38.	118.	3.	-6.	32.
65) Transportation & warehousing	20653.	11396.	829.	228.	3891.	2996.	328.	632.	113.	39.	201.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	15952.	13935.	0.	0.	74.	295.	49.	1054.	96.	56.	393.
69) Wholesale & retail trade, Net	105261.	95836.	5530.	407.	2098.	911.	205.	-113.	213.	47.	127.
70) Finance & insurance, Net	705.	672.	0.	0.	0.	0.	0.	0.	0.	0.	34.
71) Real estate & rental, Net	65285.	63027.	1322.	0.	363.	81.	103.	106.	68.	16.	200.
72) Hotels:personal&rep svcs exc auto,Net	15053.	14367.	0.	0.	3.	510.	105.	-161.	62.	23.	144.
73) Business services, Net	1817.	448.	0.	0.	49.	612.	238.	201.	84.	30.	155.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & services	8285.	8069.	0.	0.	0.	55.	9.	43.	20.	23.	68.
76) Amusements, Net	3903.	3827.	0.	0.	9.	87.	-13.	-0.	0.	0.	-8.
77) Medical,educ svcs&non-profit org, Net	22792.	20482.	0.	0.	0.	184.	141.	37.	1913.	8.	26.
78) Federal govt enterprises, Net	342.	170.	0.	0.	92.	38.	10.	4.	11.	1.	16.
79) State & local govt enterprises	1233.	925.	0.	0.	0.	6.	280.	13.	1.	4.	4.
80) Imports	-26396.	9870.	658.	-100.	-40791.	2877.	1087.	0.	1.	0.	2.
81) Business travel, entertainment & gifts	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	705213.	486717.	113362.	11998.	-4636.	44426.	12337.	12508.	6491.	1117.	20894.

TABLE 17: FINAL DEMAND COMPONENTS OF EXPERIMENTAL ECONOMY 1

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	12162.	0.	5674.	0.	15.	75.	225.	5430.	0.	266.	477.
12*) Maintenance & repair on info buildings	1424.	0.	0.	0.	0.	0.	186.	764.	150.	71.	252.
23*) Office furniture & equipment	941.	0.	649.	20.	11.	9.	32.	161.	4.	1.	54.
24*) Paper: printing (exc boxes)	364.	52.	0.	107.	82.	12.	23.	40.	16.	3.	29.
26*) Printing & publishing	5689.	4190.	0.	274.	244.	115.	32.	715.	11.	3.	105.
27*) Ink	17.	0.	0.	5.	10.	0.	1.	1.	0.	0.	0.
48*) Printing & paper machinery	783.	0.	613.	35.	114.	6.	9.	6.	0.	0.	0.
51*) Computers,calculators,office equip.	4977.	115.	3352.	155.	710.	194.	291.	118.	10.	1.	31.
53*) Electronic measuring instruments	1044.	0.	629.	20.	166.	166.	50.	2.	0.	1.	9.
56*) Radio, TV, comm'n equipment	12792.	3752.	2937.	600.	580.	4143.	657.	93.	3.	14.	11.
57*) Electronic components	1316.	176.	18.	139.	372.	494.	103.	4.	0.	8.	1.
58*) Misc electronic instruments	193.	0.	133.	7.	29.	7.	2.	2.	12.	0.	0.
62*) Mech measuring & control instruments	2117.	627.	615.	78.	461.	383.	83.	17.	34.	4.	15.
63*) Photographic & related equipment	2532.	734.	920.	78.	313.	272.	70.	65.	56.	4.	18.
64*) Advertising signs & displays	522.	210.	241.	18.	35.	1.	1.	23.	0.	-8.	1.
66*) Telecommunications, exc. radio & TV	10238.	8065.	1096.	0.	140.	324.	138.	136.	44.	43.	253.
67*) Radio, TV, CATV	7.	0.	0.	0.	0.	0.	0.	7.	0.	0.	0.
69*) Trade margin on info goods	15900.	13924.	1014.	101.	516.	184.	50.	25.	41.	12.	31.
70*) Finance & insurance: components	25824.	25311.	4.	-1.	90.	14.	36.	172.	39.	7.	151.
71*) Real estate:fees,royalties,office rental	9389.	8070.	778.	0.	214.	38.	60.	62.	40.	9.	118.
72*) Repair: radio & TV equipment	1144.	1137.	0.	0.	0.	1.	-0.	2.	3.	1.	1.
73*) Misc business info services	7341.	4262.	0.	0.	408.	1003.	586.	430.	286.	66.	300.
76*) Motion pictures	2183.	1795.	0.	-57.	322.	87.	5.	24.	0.	2.	4.
77*) Medical, educational, nonprofit	23447.	21229.	0.	0.	0.	721.	1000.	101.	323.	32.	41.
78*) Postal service	1492.	1084.	0.	0.	14.	150.	46.	23.	65.	9.	101.
82*) Office Supplies	450.	0.	0.	0.	0.	79.	77.	143.	30.	14.	107.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	2070.	1864.	0.	129.	55.	4.	4.	1.	10.	1.	2.
2) Other agricultural products	6957.	3865.	0.	1031.	3184.	6.	-1202.	16.	9.	4.	43.
3) Forestry and fishery products	261.	462.	0.	2.	47.	4.	-259.	1.	2.	1.	1.
4) Agr., Forest, Fish Services	187.	140.	0.	0.	14.	8.	1.	16.	1.	1.	5.
5) Iron & ferroalloy ores mining	95.	0.	0.	25.	122.	-52.	-0.	0.	0.	0.	0.
6) Nonferrous metal ores mining	162.	0.	0.	12.	35.	47.	67.	0.	0.	0.	0.
7) Coal mining	614.	125.	0.	125.	306.	29.	7.	15.	1.	1.	4.
8) Crude petroleum and natural gas	339.	0.	0.	257.	82.	0.	0.	0.	0.	0.	0.
9) Stone & clay mining & quarrying	51.	4.	0.	12.	83.	-1.	-1.	0.	0.	0.	-46.
10) Chemical & fertilizer mineral min.	189.	2.	0.	8.	148.	-0.	0.	0.	0.	0.	31.
11) New construction, Net	67532.	0.	48664.	0.	0.	705.	2275.	746.	1708.	0.	13434.
12) Maintenance & repair construction	4076.	0.	0.	0.	0.	778.	294.	7.	0.	0.	2997.
13) Ordnance and accessories	7798.	331.	25.	147.	309.	5145.	1834.	0.	0.	7.	0.
14) Food & kindred products	66643.	62747.	0.	899.	1906.	165.	448.	68.	273.	73.	63.
15) Tobacco manufactures	6213.	5423.	0.	189.	601.	0.	0.	0.	0.	-1.	0.
16) Fabrics, yarn & thread mills	1060.	609.	0.	114.	250.	59.	1.	9.	17.	1.	1.
17) Misc. textile goods & floor cover.	1749.	1446.	89.	107.	89.	11.	6.	0.	0.	-1.	0.
18) Apparel	17320.	16719.	0.	281.	169.	77.	31.	2.	11.	28.	2.
19) Misc. fabricated textile products	2452.	2040.	0.	49.	74.	259.	13.	5.	12.	-5.	5.
20) Lumber, wood prod. exc. containers	790.	266.	7.	121.	387.	18.	8.	3.	0.	0.	0.
21) Wooden containers	26.	0.	0.	2.	3.	17.	3.	0.	0.	0.	0.
22) Household furniture	4290.	3973.	164.	49.	24.	20.	30.	21.	2.	2.	3.
23) Other furniture, fixtures, Net	1308.	179.	983.	20.	8.	22.	18.	73.	2.	-2.	4.
24) Paper, allied prod. exc containers, Net	2340.	1494.	0.	121.	567.	37.	31.	53.	13.	7.	16.
25) Paperboard containers, boxes	187.	75.	0.	39.	24.	23.	5.	12.	6.	2.	1.

TABLE 17: FINAL DEMAND COMPONENTS OF EXPERIMENTAL ECONOMY I - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
26) Printing & publishing, Net	155.	49.	0.	23.	8.	28.	17.	5.	2.	1.	22.
27) Chemicals, select Chem products, Net	4125.	519.	0.	300.	1700.	1029.	464.	13.	31.	2.	65.
28) Plastics, synthetic materials	767.	18.	0.	26.	670.	52.	0.	0.	0.	0.	0.
29) Drugs, Cleaning, Toilet preparations	8857.	7506.	0.	221.	435.	97.	71.	145.	359.	5.	19.
30) Paints & allied products	161.	53.	0.	54.	47.	2.	1.	1.	2.	-2.	1.
31) Petroleum refining & related ind's	12979.	10491.	0.	541.	765.	751.	139.	146.	34.	33.	79.
32) Rubber & misc plastics products	3324.	2335.	30.	142.	323.	284.	37.	44.	41.	44.	43.
33) Leather tanning, ind. leather prods.	42.	0.	0.	-6.	43.	4.	2.	0.	0.	0.	0.
34) Footwear & other leather products	3822.	3765.	0.	21.	20.	11.	2.	0.	1.	2.	0.
35) Glass & glass products	580.	327.	0.	39.	145.	8.	8.	22.	29.	2.	0.
36) Stone & clay products	591.	252.	0.	127.	177.	18.	4.	9.	2.	1.	0.
37) Primary iron & steel manufacturing	1271.	4.	0.	514.	518.	229.	4.	0.	0.	2.	0.
38) Primary nonferrous metal manufacturing	1111.	15.	34.	336.	726.	33.	-34.	0.	0.	0.	0.
39) Metal containers	97.	0.	10.	61.	16.	10.	0.	0.	0.	0.	0.
40) Heating, plumbing & struc metal prods.	1599.	68.	933.	128.	284.	143.	43.	0.	0.	0.	0.
41) Stamping,screw mach. prods & bolts	876.	385.	0.	86.	274.	86.	31.	23.	2.	-14.	1.
42) Other fabricated metal products	2017.	797.	337.	198.	434.	181.	37.	27.	4.	-3.	5.
43) Engines and turbines	1683.	149.	735.	55.	393.	293.	49.	0.	0.	0.	9.
44) Farm machinery & equipment	3864.	40.	2942.	409.	419.	20.	3.	9.	2.	3.	15.
45) Const., mining & oil field machs.	4061.	0.	2428.	58.	1269.	236.	13.	0.	11.	0.	46.
46) Materials handling mach & equipment	1360.	0.	1107.	36.	132.	66.	17.	1.	0.	0.	0.
47) Metalworking mach & equipment	4356.	90.	3461.	167.	486.	92.	36.	14.	2.	0.	7.
48) Spec ind mach & equipment, Net	3376.	23.	2592.	56.	677.	19.	5.	5.	0.	0.	0.
49) General ind mach & equipment	2907.	0.	1888.	125.	627.	194.	60.	0.	0.	5.	7.
50) Machine shop products	316.	4.	5.	32.	63.	78.	8.	108.	14.	0.	2.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	2839.	416.	1729.	126.	359.	77.	7.	105.	14.	2.	3.
53) Elec ind equip & apparatus, Net	3294.	29.	2257.	112.	391.	377.	69.	16.	2.	0.	39.
54) Household appliances	4056.	3641.	127.	102.	149.	9.	3.	13.	9.	2.	0.
55) Electric lighting & wiring equip.	974.	573.	66.	57.	169.	28.	13.	55.	2.	3.	7.
56) Radio, television & comm. eqdip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc elec machinery, Net	1067.	644.	76.	28.	132.	149.	25.	2.	1.	3.	6.
59) Motor vehicles & equipment	28566.	16282.	9054.	-310.	1976.	678.	155.	182.	27.	87.	435.
60) Aircraft and parts	13228.	51.	2367.	1918.	1809.	6272.	809.	0.	0.	2.	0.
61) Other transportation equipment	6241.	1109.	3430.	196.	206.	1062.	220.	0.	0.	10.	8.
62) Scientific & controlling instru.	1066.	191.	517.	31.	107.	86.	50.	7.	73.	2.	1.
63) Optical, ophthalmic&photo equip, Net	353.	326.	0.	0.	8.	12.	4.	0.	2.	0.	0.
64) Misc manufacturing, Net	5286.	4336.	291.	130.	297.	46.	38.	118.	3.	-6.	32.
65) Transportation & warehousing	20386.	11728.	829.	228.	3891.	2397.	328.	632.	113.	39.	201.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	16298.	14340.	0.	0.	74.	236.	49.	1054.	96.	56.	393.
69) Wholesale & retail trade, Net	107866.	98622.	5530.	407.	2098.	729.	205.	-113.	213.	47.	127.
70) Finance & insurance, Net	725.	691.	0.	0.	0.	0.	0.	0.	0.	0.	34.
71) Real estate & rental, Net	67101.	64859.	1322.	0.	363.	65.	103.	106.	68.	16.	.200.
72) Hotels:personal&rep svms exc auto,Net	15368.	14785.	0.	0.	3.	408.	105.	-161.	62.	23.	144.
73) Business services, Net	1708.	461.	0.	0.	49.	489.	238.	201.	84.	30.	155.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & services	8509.	8303.	0.	0.	0.	44.	9.	43.	20.	23.	68.
76) Amusements, Net	3997.	3938.	0.	0.	9.	70.	-12.	-0.	0.	0.	-8.
77) Medical,educ svcs&non-profit org, Net	23350.	21078.	0.	0.	0.	148.	141.	37.	1913.	8.	26.
78) Federal govt enterprises, Net	339.	175.	0.	0.	92.	30.	10.	4.	10.	1.	16.
79) State & local govt enterprises	1259.	952.	0.	0.	0.	5.	280.	13.	1.	4.	4.
80) Imports	-26685.	10157.	658.	-100.	-40791.	2302.	1087.	0.	1.	0.	2.
81) Business travel, entertainment & gifts	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	710473.	500869.	113362.	11998.	-4636.	35541.	12337.	12508.	6491.	1117.	20894.

TABLE 18: TOTAL OUTPUTS IN EXPERIMENTAL ECONOMY I (By Final Demand Components)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	12162.	0.	5674.	0.	15.	75.	225.	5430.	0.	266.	477.
12*) Maintenance & repair on info buildings	7731.	4357.	842.	105.	307.	286.	207.	853.	215.	80.	389.
23*) Office furniture & equipment	1132.	59.	724.	26.	21.	28.	37.	172.	5.	1.	58.
24*) Paper: printing (exc boxes)	4579.	2957.	425.	204.	318.	177.	99.	193.	58.	12.	136.
26*) Printing & publishing	20808.	14448.	1751.	484.	867.	825.	401.	1196.	211.	44.	581.
27*) Ink	386.	255.	35.	14.	29.	15.	8.	16.	4.	1.	10.
48*) Printing & paper machinery	986.	76.	702.	40.	134.	10.	11.	9.	1.	0.	2.
51*) Computers,calculators,office equip.	6622.	681.	3996.	198.	860.	309.	356.	150.	17.	2.	52.
53*) Electronic measuring instruments	1446.	112.	754.	36.	206.	246.	67.	7.	3.	1.	15.
56*) Radio, TV, comm'n equipment	16218.	4817.	3739.	757.	843.	4994.	840.	131.	15.	19.	63.
57*) Electronic components	7698.	2130.	1691.	400.	857.	2030.	442.	67.	17.	16.	47.
58*) Misc electronic instruments	242.	22.	148.	8.	34.	10.	3.	2.	13.	0.	1.
62*) Mech measuring & control instruments	4282.	1056.	1317.	155.	642.	701.	164.	87.	54.	9.	97.
63*) Photographic & related equipment	4286.	1834.	1139.	104.	406.	419.	125.	107.	87.	8.	57.
64*) Advertising signs & displays	1690.	917.	425.	34.	84.	61.	34.	71.	16.	-4.	51.
66*) Telecommunications, exc. radio & TV	19517.	14266.	2434.	142.	565.	817.	312.	302.	132.	58.	489.
67*) Radio, TV, CATV	3191.	2072.	441.	39.	142.	164.	79.	91.	45.	9.	108.
69*) Trade margin on info goods	23077.	17984.	2610.	232.	893.	502.	171.	192.	111.	25.	358.
70*) Finance & insurance: components	47661.	42466.	2143.	214.	812.	541.	231.	463.	172.	30.	589.
71*) Real estate:fees,royalties,office rentals	23903.	18662.	2407.	248.	929.	565.	225.	262.	167.	29.	407.
72*) Repair: radio & TV equipment	1483.	1392.	33.	4.	12.	16.	5.	5.	7.	1.	7.
73*) Misc business info services	47452.	30765.	6626.	593.	2135.	2465.	1176.	1261.	675.	130.	1627.
76*) Motion pictures	4971.	3878.	199.	-68.	558.	207.	43.	74.	20.	7.	52.
77*) Medical, educational, nonprofit	24994.	22331.	198.	21.	60.	785.	1024.	126.	337.	24.	79.
78*) Postal service	4538.	3333.	323.	37.	126.	270.	97.	78.	97.	14.	164.
82*) Office Supplies	2609.	1604.	236.	26.	80.	164.	110.	175.	48.	17.	150.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	31323.	28471.	427.	620.	1155.	181.	98.	75.	156.	32.	107.
2) Other agricultural products	28705.	23123.	544.	1454.	4151.	187.	-1158.	94.	115.	26.	171.
3) Forestry and fishery products	1971.	1373.	445.	37.	134.	45.	-232.	34.	20.	3.	113.
4) Agr., Forest, Fish Services	2700.	2103.	183.	83.	244.	29.	-49.	32.	15.	4.	55.
5) Iron & ferroalloy ores mining	1739.	525.	590.	98.	291.	73.	39.	36.	12.	3.	74.
6) Nonferrous metal ores mining	1607.	412.	472.	83.	212.	178.	114.	55.	11.	3.	67.
7) Coal mining	3169.	1623.	441.	199.	502.	151.	49.	92.	21.	6.	84.
8) Crude petroleum and natural gas	15131.	10564.	1232.	667.	968.	717.	186.	301.	94.	32.	378.
9) Stone & clay mining & quarrying	2353.	648.	973.	50.	181.	70.	54.	85.	35.	4.	252.
10) Chemical & fertilizer mineral min.	1021.	431.	104.	39.	276.	66.	24.	14.	8.	1.	57.
11) New construction, Net	67532.	0.	48664.	0.	0.	705.	2275.	746.	1708.	0.	13434.
12) Maintenance & repair construction	15683.	9404.	771.	124.	466.	1068.	417.	186.	61.	15.	3170.
13) Ordnance and accessories	9296.	554.	241.	223.	418.	5809.	2023.	8.	2.	8.	9.
14) Food & kindred products	91541.	84377.	918.	1275.	2797.	518.	655.	193.	464.	101.	244.
15) Tobacco manufactures	8135.	7043.	42.	244.	774.	14.	5.	5.	3.	-1.	7.
16) Fabrics, yarn & thread mills	16228.	13496.	722.	440.	743.	464.	81.	84.	73.	18.	107.
17) Misc. textile goods & floor cover.	4730.	3446.	579.	167.	226.	131.	31.	42.	21.	3.	85.
18) Apparel	23145.	21947.	215.	377.	271.	158.	58.	18.	26.	36.	38.
19) Misc. fabricated textile products	4299.	3399.	268.	66.	163.	312.	26.	19.	20.	-2.	29.
20) Lumber, wood prod. exc. containers	12499.	3632.	5426.	302.	828.	419.	337.	385.	185.	19.	1267.

TABLE 18: TOTAL OUTPUTS IN EXPERIMENTAL ECONOMY I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
21) Wooden containers	542.	360.	68.	16.	39.	35.	4.	5.	3.	1.	10.
22) Household furniture	5211.	4217.	564.	67.	49.	118.	61.	37.	14.	3.	81.
23) Other furniture, fixtures, Net	1747.	248.	1213.	26.	19.	40.	29.	122.	7.	0.	42.
24) Paper, allied prod. exc containers, Net	12836.	8590.	1262.	364.	1162.	443.	216.	348.	118.	29.	305.
25) Paperboard containers, boxes	6088.	4390.	618.	159.	337.	243.	87.	91.	56.	10.	97.
26) Printing & publishing, Net	1679.	1127.	155.	45.	69.	93.	49.	50.	20.	5.	65.
27) Chemicals, select Chem products, Net	22569.	12006.	2088.	897.	3682.	2094.	739.	311.	217.	32.	503.
28) Plastics, synthetic materials	8455.	5182.	939.	243.	1196.	439.	110.	110.	56.	17.	163.
29) Drugs, Cleaning, Toilet preparations	12832.	10749.	184.	270.	582.	204.	125.	174.	474.	9.	60.
30) Paints & allied products	2917.	1325.	722.	95.	174.	130.	67.	103.	32.	5.	266.
31) Petroleum refining & related ind's	27111.	18953.	2363.	840.	1802.	1439.	355.	431.	161.	56.	710.
32) Rubber & misc plastics products	13843.	8574.	2186.	338.	930.	796.	213.	247.	138.	63.	359.
33) Leather tanning, ind. leather prods.	1114.	996.	26.	2.	62.	15.	5.	2.	1.	1.	4.
34) Footwear & other leather products	4353.	4217.	32.	26.	32.	25.	7.	2.	4.	2.	6.
35) Glass & glass products	3830.	2472.	508.	90.	306.	151.	61.	99.	58.	9.	78.
36) Stone & clay products	11304.	1999.	5507.	222.	435.	301.	299.	628.	185.	32.	1395.
37) Primary iron & steel manufacturing	31375.	9824.	11563.	1373.	3045.	2449.	734.	696.	216.	52.	1423.
38) Primary nonferrous metal manufacturing	20551.	5446.	7160.	1032.	2460.	1868.	521.	874.	151.	51.	988.
39) Metal containers	3405.	2696.	189.	124.	172.	81.	33.	33.	28.	4.	46.
40) Heating, plumbing & struc metal prods.	12446.	1382.	7051.	186.	463.	405.	364.	778.	194.	39.	1584.
41) Stamping,screw mach. prods & bolts	9229.	4486.	2300.	246.	855.	747.	204.	146.	44.	3.	198.
42) Other fabricated metal products	12430.	4989.	3740.	417.	1075.	892.	287.	331.	96.	19.	585.
43) Engines and turbines	3729.	713.	1646.	125.	599.	459.	89.	22.	9.	3.	66.
44) Farm machinery & equipment	4820.	467.	3252.	456.	530.	56.	1.	18.	7.	4.	29.
45) Const., mining & oil field machs.	5903.	571.	3163.	106.	1473.	343.	41.	35.	27.	3.	130.
46) Materials handling mach & equipment	2518.	265.	1648.	53.	200.	109.	45.	79.	14.	4.	101.
47) Metalworking mach & equipment	8576.	1461.	4981.	316.	893.	557.	152.	81.	22.	6.	107.
48) Spec ind mach & equipment, Net	4726.	654.	3000.	91.	823.	80.	25.	20.	7.	1.	25.
49) General ind mach & equipment	7695.	1380.	3896.	285.	1135.	561.	159.	79.	26.	12.	161.
50) Machine shop products	3825.	1269.	963.	176.	368.	600.	128.	170.	32.	6.	92.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	5274.	1283.	2693.	151.	474.	161.	58.	231.	42.	11.	170.
53) Elec ind equip & apparatus, Net	8305.	1510.	4349.	251.	823.	737.	183.	164.	37.	10.	241.
54) Household appliances	5550.	4266.	637.	131.	231.	77.	30.	60.	21.	5.	91.
55) Electric lighting & wiring equip.	4112.	1437.	1430.	95.	303.	182.	100.	219.	41.	13.	292.
56) Radio, television & comm. equip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc elec machinery, Net	2867.	1565.	550.	62.	268.	271.	52.	31.	9.	7.	52.
59) Motor vehicles & equipment	44144.	25209.	13537.	-345.	3020.	1220.	293.	317.	61.	129.	702.
60) Aircraft and parts	19762.	792.	3496.	2510.	2511.	9002.	1366.	31.	9.	6.	38.
61) Other transportation equipment	7952.	1605.	3879.	229.	314.	1200.	249.	20.	7.	12.	38.
62) Scientific & controlling instru.	1792.	696.	607.	42.	139.	119.	62.	15.	100.	3.	10.
63) Optical, ophthalmic&photo equip, Net	475.	399.	23.	2.	16.	21.	7.	2.	4.	0.	2.
64) Misc manufacturing, Net	7844.	6242.	573.	167.	385.	133.	73.	154.	24.	-3.	96.
65) Transportation & warehousing	52321.	30673.	6825.	830.	5897.	3947.	873.	1324.	406.	95.	1450.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	37865.	29556.	2509.	342.	1103.	1085.	385.	1576.	311.	96.	903.
69) Wholesale & retail trade, Net	143358.	118418.	13658.	1018.	3868.	2271.	817.	743.	571.	111.	1885.
70) Finance & insurance, Net	1241.	1104.	44.	5.	16.	13.	5.	7.	3.	1.	43.
71) Real estate & rental, Net	91771.	82865.	4091.	421.	1579.	961.	383.	446.	284.	50.	692.
72) Hotels:personal&rep svcs exc auto,Net	19708.	17974.	508.	58.	170.	606.	174.	-106.	110.	30.	235.
73) Business services, Net	9482.	5299.	1306.	157.	480.	898.	370.	350.	157.	42.	422.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & services	15033.	12733.	1025.	67.	309.	287.	97.	152.	75.	34.	255.
76) Amusements, Net	4831.	4587.	78.	7.	37.	98.	-3.	11.	6.	1.	7.
77) Medical,educ svcs&non-profit org, Net	24569.	22099.	59.	8.	22.	178.	164.	47.	1945.	9.	38.

TABLE 18: TOTAL OUTPUTS IN EXPERIMENTAL ECONOMY I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
78) Federal govt enterprises, Net	3222.	2513.	233.	23.	179.	96.	35.	48.	27.	5.	63.
79) State & local govt enterprises	9768.	7401.	696.	83.	362.	295.	371.	277.	65.	21.	196.
80) Imports	-2786.	23161.	5581.	625.	-38732.	3801.	1466.	466.	168.	40.	678.
81) Business travel, entertainment & gifts	11249.	7126.	1869.	188.	-536.	633.	226.	205.	118.	18.	321.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL NON-INFORMATION	1139861.	748045.	206518.	22357.	24037.	55358.	18086.	15416.	10069.	1537.	38445.
TOTAL INFORMATION	293663.	192474.	41013.	4054.	11934.	16683.	6583.	11523.	2526.	809.	6065.
TOTAL	1433511.	940518.	247529.	26410.	35971.	72041.	24669.	26939.	12594.	2346.	44511.

TABLE 19: DIRECT OUTPUTS OF EXPERIMENTAL ECONOMY I (By Final Demand Components)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FG	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	12162.	0.	5674.	0.	15.	75.	225.	5430.	0.	266.	477.
12*) Maintenance & repair on info buildings	1430.	0.	0.	0.	0.	0.	187.	768.	151.	71.	253.
23*) Office furniture & equipment	948.	0.	654.	21.	11.	9.	32.	163.	4.	1.	54.
24*) Paper: printing (exc boxes)	384.	55.	0.	112.	86.	12.	25.	42.	17.	4.	31.
26*) Printing & publishing	6459.	4758.	0.	311.	277.	131.	36.	812.	13.	3.	119.
27*) Ink	17.	0.	0.	5.	10.	0.	1.	1.	0.	0.	0.
48*) Printing & paper machinery	858.	0.	671.	38.	125.	7.	10.	6.	0.	0.	0.
51*) Computers,calculators,office equip.	5745.	133.	3869.	179.	819.	224.	335.	137.	11.	1.	36.
53*) Electronic measuring instruments	1087.	0.	654.	21.	173.	173.	52.	3.	1.	1.	10.
56*) Radio, TV, comm'n equipment	13770.	4039.	3161.	646.	625.	4460.	708.	100.	4.	15.	12.
57*) Electronic components	1552.	207.	22.	164.	439.	582.	122.	5.	1.	9.	2.
58*) Misc electronic instruments	205.	0.	141.	8.	31.	7.	3.	2.	13.	0.	0.
62*) Mech measuring & control instruments	2304.	465.	669.	85.	502.	417.	90.	19.	38.	4.	16.
63*) Photographic & related equipment	2700.	783.	981.	83.	334.	290.	75.	70.	60.	5.	19.
64*) Advertising signs & displays	541.	217.	250.	18.	36.	1.	1.	24.	0.	-8.	1.
66*) Telecommunications, exc. radio & TV	10339.	8145.	1107.	0.	141.	327.	140.	137.	44.	43.	255.
67*) Radio, TV, CATV	7.	0.	0.	0.	0.	0.	+0.	7.	0.	0.	0.
69*) Trade margin on info goods	15999.	14011.	1020.	102.	520.	185.	51.	26.	42.	12.	31.
70*) Finance & insurance: components	31623.	30996.	5.	-1.	111.	17.	45.	211.	48.	8.	185.
71*) Real estate:fees,royalties,office rentals	9623.	8271.	797.	0.	219.	39.	62.	64.	41.	10.	121.
72*) Repair: radio & TV equipment	1148.	1141.	0.	0.	0.	1.	-1.	2.	3.	1.	1.
73*) Misc business info services	7854.	4561.	0.	0.	437.	1073.	627.	460.	306.	71.	321.
76*) Motion pictures	3332.	2740.	0.	-87.	492.	133.	8.	37.	0.	3.	6.
77*) Medical, educational, nonprofit	23504.	21282.	0.	0.	0.	723.	1003.	101.	323.	32.	41.
78*) Postal service	1493.	1085.	0.	0.	14.	150.	47.	23.	65.	9.	101.
82*) Office Supplies	451.	0.	0.	0.	0.	79.	77.	143.	30.	14.	108.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	2704.	2435.	0.	169.	72.	5.	5.	2.	13.	2.	2.
2) Other agricultural products	7426.	4126.	0.	1100.	3399.	6.	-1283.	17.	10.	5.	46.
3) Forestry and fishery products	266.	470.	0.	2.	48.	4.	-264.	1.	2.	1.	2.
4) Agr., Forest, Fish Services	189.	141.	0.	0.	15.	8.	1.	17.	1.	2.	5.
5) Iron & ferroalloy ores mining	101.	0.	0.	27.	129.	-55.	-0.	0.	0.	0.	0.
6) Nonferrous metal ores mining	186.	0.	0.	14.	40.	54.	78.	0.	0.	0.	0.
7) Coal mining	704.	143.	0.	144.	351.	33.	3.	18.	2.	1.	5.
8) Crude petroleum and natural gas	349.	0.	0.	265.	85.	0.	0.	0.	0.	0.	0.
9) Stone & clay mining & quarrying	53.	4.	0.	12.	86.	-1.	-1.	0.	0.	0.	-48.
10) Chemical & fertilizer mineral min.	202.	3.	0.	8.	158.	-0.	0.	0.	0.	0.	33.
11) New construction, Net	67532.	0.	48664.	0.	0.	705.	2275.	746.	1708.	0.	13434.
12) Maintenance & repair construction	4094.	0.	0.	0.	0.	782.	295.	7.	0.	0.	3010.
13) Ordnance and accessories	8453.	359.	27.	159.	335.	5577.	1988.	0.	0.	7.	0.
14) Food & kindred products	83756.	78860.	0.	1130.	2395.	208.	564.	85.	344.	91.	79.
15) Tobacco manufactures	7874.	6873.	0.	240.	762.	0.	0.	0.	0.	-1.	0.
16) Fabrics, yarn & thread mills	1598.	919.	0.	172.	377.	89.	1.	13.	25.	1.	1.
17) Misc. textile goods & floor cover.	1688.	1562.	96.	116.	96.	12.	7.	0.	0.	-2.	0.
18) Apparel	21883.	21123.	0.	355.	214.	97.	39.	3.	14.	35.	2.
19) Misc. fabricated textile products	2520.	2097.	0.	50.	76.	266.	13.	6.	12.	-5.	5.
20) Lumber, wood prod. exc. containers	1088.	366.	9.	167.	505.	25.	11.	4.	0.	0.	0.

TABLE 19: DIRECT OUTPUTS OF EXPERIMENTAL ECONOMY I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
21) Wooden containers	26.	0.	0.	3.	3.	17.	3.	0.	0.	0.	0.
22) Household furniture	4360.	4038.	167.	50.	24.	21.	31.	21.	3.	2.	3.
23) Other furniture, fixtures, Net	1394.	185.	1018.	21.	9.	23.	18.	76.	2.	-2.	4.
24) Paper, allied prod. exc containers, Net	2691.	1718.	0.	140.	652.	43.	36.	61.	15.	8.	19.
25) Paperboard containers, boxes	194.	78.	0.	40.	25.	24.	5.	12.	7.	2.	1.
26) Printing & publishing, Net	157.	49.	0.	23.	8.	29.	17.	5.	2.	1.	23.
27) Chemicals, select Chem products, Net	5218.	656.	0.	380.	2151.	1301.	588.	17.	40.	2.	83.
28) Plastics, synthetic materials	807.	19.	0.	27.	705.	55.	0.	0.	0.	0.	0.
29) Drugs, Cleaning, Toilet preparations	9395.	7962.	0.	235.	462.	103.	75.	153.	381.	5.	20.
30) Paints & allied products	163.	54.	0.	55.	48.	2.	1.	2.	2.	-2.	1.
31) Petroleum refining & related ind's	14052.	11390.	0.	588.	830.	816.	151.	158.	37.	36.	86.
32) Rubber & misc plastics products	3504.	2462.	32.	150.	340.	299.	39.	47.	43.	46.	48.
33) Leather tanning, ind. leather prods.	48.	0.	0.	-7.	49.	4.	2.	0.	0.	0.	0.
34) Footwear & other leather products	3930.	3872.	0.	21.	20.	11.	2.	0.	1.	2.	0.
35) Glass & glass products	620.	349.	0.	42.	155.	9.	9.	23.	31.	2.	0.
36) Stone & clay products	669.	285.	0.	144.	201.	21.	4.	11.	3.	1.	0.
37) Primary iron & steel manufacturing	1622.	5.	0.	656.	662.	292.	5.	0.	0.	3.	0.
38) Primary nonferrous metal manufacturing	1670.	23.	52.	505.	1092.	50.	-51.	0.	0.	0.	0.
39) Metal containers	99.	0.	11.	62.	16.	10.	0.	0.	0.	0.	0.
40) Heating, plumbing & struc metal prods.	1649.	70.	962.	132.	293.	147.	44.	0.	0.	0.	0.
41) Stamping,screw mach. prods & bolts	912.	401.	0.	89.	286.	90.	33.	24.	2.	-14.	1.
42) Other fabricated metal products	2118.	837.	354.	208.	456.	190.	39.	28.	4.	-3.	5.
43) Engines and turbines	1831.	162.	800.	59.	428.	318.	53.	0.	0.	0.	10.
44) Farm machinery & equipment	4067.	42.	3097.	431.	441.	21.	4.	10.	3.	3.	16.
45) Const., mining & oil field machs.	4311.	0.	2578.	62.	1348.	250.	14.	0.	12.	0.	48.
46) Materials handling mach & equipment	1439.	0.	1172.	39.	140.	69.	18.	1.	0.	0.	0.
47) Metalworking mach & equipment	4719.	98.	3750.	181.	526.	100.	39.	16.	2.	0.	7.
48) Spec ind mach & equipment, Net	3598.	24.	2762.	59.	721.	21.	5.	6.	0.	0.	0.
49) General ind mach & equipment	3149.	0.	2045.	136.	679.	210.	65.	0.	0.	6.	8.
50) Machine shop products	339.	5.	5.	35.	68.	84.	9.	115.	16.	1.	2.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	3048.	446.	1856.	135.	386.	83.	7.	113.	16.	3.	4.
53) Elec ind equip & apparatus, Net	3597.	31.	2465.	123.	427.	412.	75.	17.	3.	0.	43.
54) Household appliances	4138.	3715.	130.	105.	152.	9.	3.	13.	10.	2.	0.
55) Electric lighting & wiring equip.	1013.	596.	69.	60.	175.	29.	13.	57.	2.	4.	7.
56) Radio, television & comm. equip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc,elec machinery, Net	1135.	685.	81.	30.	141.	159.	26.	2.	1.	3.	6.
59) Motor vehicles & equipment	40002.	22800.	12679.	-434.	2767.	949.	217.	254.	37.	123.	609.
60) Aircraft and parts	16876.	65.	3020.	2447.	2307.	8002.	1033.	0.	0.	2.	0.
61) Other transportation equipment	6641.	1180.	3650.	209.	220.	1130.	234.	0.	0.	11.	9.
62) Scientific & controlling instru.	1087.	194.	527.	32.	109.	87.	51.	8.	75.	2.	1.
63) Optical. ophthalmic&photo equip, Net	380.	351.	0.	0.	9.	13.	4.	0.	2.	0.	0.
64) Misc manufacturing, Net	5682.	4661.	313.	139.	320.	49.	41.	127.	4.	-7.	35.
65) Transportation & warehousing	22965.	13212.	933.	257.	4383.	2700.	370.	713.	127.	44.	227.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	20499.	18037.	0.	0.	93.	297.	52.	1325.	120.	70.	494.
69) Wholesale & retail trade, Net	110862.	101362.	5683.	418.	2157.	749.	211.	-116.	219.	48.	131.
70) Finance & insurance, Net	745.	710.	0.	0.	0.	0.	0.	0.	0.	0.	35.
71) Real estate & rental, Net	68835.	66535.	1356.	0.	373.	67.	105.	108.	70.	16.	205.
72) Hotels:personal&rep svcs exc auto,Net	15831.	15230.	0.	0.	3.	420.	108.	-166.	64.	24.	148.
73) Business services, Net	1725.	466.	0.	0.	50.	494.	241.	203.	85.	30.	151.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & service	8565.	8358.	0.	0.	0.	44.	9.	43.	20.	23.	68.
76) Amusements, Net	4179.	4117.	0.	0.	10.	73.	-13.	-0.	0.	0.	-8.
77) Medical,educ svcs&non-profit org, Net	23649.	21347.	0.	0.	0.	149.	143.	37.	1938.	8.	26.

TABLE 19: DIRECT OUTPUTS OF EXPERIMENTAL ECONOMY I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
78) Federal govt enterprises, Net	340.	175.	0.	0.	92.	30.	10.	4.	11.	2.	16.
79) State & local govt enterprises	1287.	973.	0.	0.	0.	5.	286.	14.	1.	4.	4.
80) Imports	-26685.	10157.	658.	-100.	-40791.	2302.	1087.	0.	1.	0.	2.
81) Business travel, entertainment & gifts	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL NON-INFORMATION	628015.	449667.	101021.	12116.	-4635.	30696.	9320.	4462.	5540.	648.	19180.
TOTAL INFORMATION	155537.	102885.	19676.	1705.	5415.	9117.	3961.	8792.	1212.	575.	2200.
TOTAL	783551.	552552.	120697.	13821.	779.	39813.	13281.	13255.	6752.	1223.	21379.

TABLE 20: INDIRECT OUTPUTS OF EXPERIMENTAL ECONOMY I (By Final Demand Components)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12*) Maintenance & repair on info buildings	6301.	4357.	842.	105.	307.	286.	109.	85.	65.	10.	135.
23*) Office furniture & equipment	184.	59.	70.	6.	10.	19.	5.	9.	1.	0.	4.
24*) Paper: printing (exc boxes)	4195.	2902.	425.	92.	232.	165.	75.	151.	41.	8.	105.
26*) Printing & publishing	14349.	9690.	1751.	173.	590.	694.	365.	384.	199.	41.	462.
27*) Ink	389.	255.	35.	9.	19.	15.	7.	14.	4.	1.	10.
48*) Frinting & paper machinery	128.	76.	31.	2.	10.	3.	1.	2.	1.	0.	2.
51*) Computers,calculators,office equip.	877.	548.	127.	10.	41.	85.	21.	13.	6.	1.	16.
53*) Electronic measuring instruments	360.	112.	99.	15.	33.	73.	15.	5.	2.	1.	5.
56*) Radio, TV, comm'n equipment	2448.	778.	577.	111.	218.	534.	133.	31.	11.	4.	51.
57*) Electronic components	6146.	1923.	1669.	236.	419.	1448.	321.	62.	17.	7.	45.
58*) Misc electronic instruments	37.	22.	7.	1.	3.	3.	1.	1.	0.	0.	1.
62*) Mech measuring & control instruments	1978.	591.	648.	70.	140.	284.	75.	68.	16.	4.	81.
63*) Photographic & related equipment	1586.	1051.	158.	21.	72.	129.	50.	38.	27.	4.	38.
64*) Advertising signs & displays	1150.	700.	175.	15.	48.	60.	33.	47.	16.	4.	50.
66*) Te ecommunications, exc. radio & TV	9178.	6122.	1327.	142.	424.	489.	173.	165.	88.	14.	233.
67*) Radio, TV, CATV	3183.	2072.	441.	39.	142.	164.	79.	84.	45.	9.	108.
69*) Trade margin on info goods	7077.	3972.	1590.	130.	373.	317.	120.	166.	69.	13.	327.
70*) Finance & insurance: components	16039.	11473.	2138.	215.	702.	524.	186.	252.	124.	22.	404.
71*) Real estate:fees,royalties,office rentals	14280.	10391.	1610.	248.	710.	526.	164.	199.	126.	20.	287.
72*) Repair: radio & TV equipment	335.	251.	33.	4.	12.	15.	5.	4.	4.	1.	6.
73*) Misc business info services	39597.	26204.	6626.	593.	1698.	1392.	549.	801.	369.	59.	1306.
76*) Motion pictures	1639.	1138.	199.	19.	66.	75.	34.	37.	20.	4.	46.
77*) Medical, educational, nonprofit	1490.	1049.	198.	21.	60.	63.	21.	25.	13.	2.	38.
78*) Postal service	3044.	2249.	323.	37.	111.	120.	50.	55.	32.	5.	63.
82*) Office Supplies	2158.	1604.	236.	26.	80.	85.	32.	32.	18.	3.	42.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	28619.	26036.	427.	452.	1083.	176.	93.	73.	143.	30.	105.
2) Other agricultural products	21279.	18997.	544.	354.	752.	180.	125.	76.	105.	21.	126.
3) Forestry and fishery products	1705.	902.	445.	34.	86.	41.	32.	33.	18.	2.	111.
4) Agr., Forest, Fish Services	2511.	1961.	183.	83.	229.	22.	-50.	16.	14.	2.	50.
5) Iron & ferroalloy ores mining	1639.	525.	590.	71.	162.	128.	39.	36.	12.	3.	74.
6) Nonferrous metal ores mining	1421.	412.	472.	69.	172.	124.	36.	55.	11.	3.	67.
7) Coal mining	2465.	1480.	441.	56.	150.	118.	42.	74.	20.	5.	79.
8) Crude petroleum and natural gas	14781.	10564.	1232.	395.	883.	717.	186.	301.	94.	32.	378.
9) Stone & clay mining & quarrying	2300.	643.	973.	38.	95.	71.	55.	85.	35.	4.	300.
10) Chemical & fertilizer mineral min.	820.	429.	104.	31.	118.	67.	24.	14.	8.	1.	24.
11) New construction, Net	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12) Maintenance & repair construction	11589.	9404.	771.	124.	466.	286.	122.	179.	61.	15.	160.
13) Ordnance and accessories	843.	194.	214.	64.	84.	232.	35.	8.	2.	1.	9.
14) Food & kindred products	7785.	5517.	918.	145.	402.	310.	91.	108.	120.	9.	165.
15) Tobacco manufactures	261.	170.	42.	4.	12.	14.	5.	5.	3.	0.	7.
16) Fabrics, yarn & thread mills	14629.	12577.	722.	268.	366.	375.	80.	70.	48.	17.	106.
17) Misc. textile goods & floor cover.	2842.	1884.	483.	51.	130.	119.	24.	42.	21.	5.	84.
18) Apparel	1261.	829.	215.	22.	57.	61.	19.	15.	12.	1.	35.
19) Misc. fabricated textile products	1760.	1302.	268.	15.	87.	46.	13.	14.	8.	3.	24.
20) Lumber, wood prod. exc. containers	11811.	3266.	5417.	135.	323.	394.	326.	380.	185.	18.	1366.

TABLE 20: INDIRECT OUTPUTS OF EXPERIMENTAL ECONOMY I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
21) Wooden containers	515.	360.	68.	14.	36.	18.	1.	5.	3.	1.	10.
22) Household furniture	851.	178.	396.	17.	25.	97.	30.	16.	11.	1.	79.
23) Other furniture, fixtures, Net	393.	63.	196.	5.	11.	17.	11.	46.	5.	2.	38.
24) Paper, allied prod. exc containers, Net	10145.	6873.	1262.	224.	510.	400.	180.	287.	103.	21.	286.
25) Paperboard containers, boxes	5894.	4312.	618.	118.	313.	219.	82.	79.	50.	8.	96.
26) Printing & publishing, Net	1522.	1078.	155.	22.	61.	64.	32.	46.	18.	4.	42.
27) Chemicals, select Chem products, Net	17350.	11350.	2088.	516.	1530.	793.	152.	294.	177.	29.	420.
28) Plastics, synthetic materials	7649.	5163.	939.	215.	492.	384.	110.	109.	56.	17.	163.
29) Drugs, Cleaning, Toilet preparations	3437.	2787.	184.	36.	121.	101.	50.	20.	94.	4.	40.
30) Paints & allied products	2754.	1271.	722.	40.	125.	128.	65.	101.	30.	7.	264.
31) Petroleum refining & related ind's	13019.	7562.	2363.	252.	971.	624.	204.	273.	124.	21.	624.
32) Rubber & misc plastics products	10339.	6112.	2155.	188.	590.	497.	173.	200.	95.	16.	314.
33) Leather tanning, ind. leather prods.	1066.	996.	26.	9.	14.	11.	3.	2.	1.	1.	4.
34) Footwear & other leather products	423.	344.	32.	4.	12.	14.	4.	2.	3.	1.	6.
35) Glass & glass products	3210.	2123.	508.	48.	150.	143.	52.	75.	26.	7.	78.
36) Stone & clay products	10335.	1714.	5507.	78.	234.	280.	295.	617.	182.	31.	1395.
37) Primary iron & steel manufacturing	29753.	9820.	11563.	717.	2384.	2156.	729.	696.	216.	49.	1423.
38) Primary nonferrous metal manufacturing	18880.	5424.	7109.	527.	1368.	1818.	572.	874.	151.	51.	988.
39) Metal containers	3307.	2696.	178.	62.	156.	71.	33.	33.	28.	4.	46.
40) Heating, plumbing & struc metal prods.	10797.	1312.	6089.	54.	170.	257.	320.	778.	194.	39.	1584.
41) Stamping,screw mach. prods & bolts	8318.	4085.	2300.	157.	569.	657.	171.	122.	41.	17.	197.
42) Other fabricated metal products	10312.	4152.	3386.	209.	619.	701.	248.	302.	93.	21.	580.
43) Engines and turbines	1898.	551.	846.	65.	171.	140.	35.	22.	9.	3.	56.
44) Farm machinery & equipment	753.	425.	155.	25.	88.	35.	-3.	8.	4.	1.	13.
45) Const., mining & oil field machs.	1592.	571.	585.	44.	125.	93.	38.	35.	15.	3.	82.
46) Materials handling mach & equipment	1079.	265.	475.	15.	60.	40.	26.	78.	14.	4.	101.
47) Metalworking mach & equipment	3857.	1364.	1231.	135.	367.	456.	113.	66.	20.	6.	100.
48) Spec ind mach & equipment, Net	1128.	630.	238.	32.	101.	59.	20.	15.	7.	1.	25.
49) General ind mach & equipment	4546.	1380.	1851.	150.	456.	351.	94.	79.	26.	7.	152.
50) Machine shop products	3486.	1264.	977.	142.	300.	516.	119.	55.	16.	6.	90.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	2227.	837.	837.	16.	88.	78.	51.	118.	26.	8.	166.
53) Elec ind equip & apparatus, Net	4708.	1478.	1884.	129.	396.	325.	107.	147.	35.	10.	198.
54) Household appliances	1412.	542.	507.	27.	79.	68.	27.	47.	12.	3.	91.
55) Electric lighting & wiring equip.	3099.	241.	1360.	36.	128.	153.	86.	162.	39.	9.	285.
56) Radio, television & comm. equip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc elec machinery, Net	1732.	879.	468.	32.	127.	112.	26.	29.	8.	4.	46.
59) Motor vehicles & equipment	4141.	2408.	858.	89.	253.	271.	75.	62.	23.	7.	94.
60) Aircraft and parts	2885.	727.	477.	62.	204.	1000.	334.	31.	9.	4.	38.
61) Other transportation equipment	912.	425.	229.	21.	94.	70.	15.	20.	7.	1.	29.
62) Scientific & controlling instru.	704.	502.	80.	10.	29.	32.	11.	7.	25.	1.	8.
63) Optical, ophthalmic&photo equip, Net	95.	48.	23.	2.	7.	8.	2.	2.	2.	0.	2.
64) Misc manufacturing, Net	2162.	1581.	260.	28.	65.	84.	32.	26.	21.	4.	61.
65) Transportation & warehousing	29356.	7462.	5892.	573.	1514.	1247.	503.	611.	280.	51.	1223.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	17366.	11519.	2509.	342.	1010.	789.	323.	250.	190.	25.	409.
69) Wholesale & retail trade, Net	32496.	17057.	7974.	600.	1711.	1522.	606.	859.	351.	63.	1754.
70) Finance & insurance, Net	496.	396.	44.	5.	16.	13.	5.	7.	3.	1.	9.
71) Real estate & rental, Net	22936.	16330.	2735.	421.	1206.	894.	278.	337.	215.	33.	487.
72) Hotels:personal&rep svcs exc auto,Net	3876.	2694.	508.	58.	167.	186.	66.	60.	46.	6.	86.
73) Business services, Net	7756.	4833.	1306.	157.	430.	403.	130.	147.	72.	12.	266.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & services	6668.	4374.	1025.	67.	309.	243.	88.	109.	55.	11.	187.
76) Amusements, Net	652.	470.	78.	7.	28.	25.	10.	11.	6.	1.	15.
77) Medical,educ svcs&non-profit org, Net	921.	752.	59.	8.	22.	28.	20.	9.	8.	1.	12.

TABLE 20: INDIRECT OUTPUTS OF EXPERIMENTAL ECONOMY I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
78) Federal govt enterprises, Net	2883.	2337.	233.	23.	87.	66.	25.	44.	17.	4.	46.
79) State & local govt enterprises	8480.	6428.	696.	83.	362.	290.	85.	264.	64.	17.	192.
80) Imports	23898.	13004.	4923.	724.	2019.	1500.	379.	466.	167.	40.	676.
81) Business travel, entertainment & gifts	11240.	7126.	1869.	188.	536.	633.	226.	205.	118.	18.	321.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL NON-INFORMATION	511849.	298376.	105497.	10240.	28672.	24661.	8766.	10953.	4529.	889.	19286.
TOTAL INFORMATION	138126.	89589.	21336.	2349.	6520.	7566.	2623.	2730.	1314.	235.	3866.
TOTAL	649975.	387965.	126832.	12589.	35192.	32228.	11388.	13684.	5843.	1124.	23131.

TABLE 21: TOTAL NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	-19.	0.	0.	0.	0.	-19.	0.	0.	0.	0.	0.
12*) Maintenance & repair on info buildings	52.	123.	0.	0.	0.	-71.	0.	0.	0.	0.	0.
23*) Office furniture & equipment	-5.	2.	0.	0.	0.	-7.	0.	0.	0.	0.	0.
24*) Paper: printing (exc boxes)	39.	84.	0.	0.	0.	-44.	0.	0.	0.	0.	0.
26*) Printing & publishing	202.	408.	0.	0.	0.	-206.	0.	0.	0.	0.	0.
27*) Ink	3.	7.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
48*) Printing & paper machinery	-0.	2.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
51*) Computers,calculators,office equip.	-58.	19.	0.	0.	0.	-77.	0.	0.	0.	0.	0.
53*) Electronic measuring instruments	-58.	3.	0.	0.	0.	-61.	0.	0.	0.	0.	0.
56*) Radio, TV, comm'n equipment	-1112.	136.	0.	0.	0.	-1249.	0.	0.	0.	0.	0.
57*) Electronic components	-447.	60.	0.	0.	0.	-507.	0.	0.	0.	0.	0.
58*) Misc electronic instruments	-2	1.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
62*) Mech measuring & control instruments	-145	30.	0.	0.	0.	-175.	0.	0.	0.	0.	0.
63*) Photographic & related equipment	-53.	52.	0.	0.	0.	-105.	0.	0.	0.	0.	0.
64*) Advertising signs & displays	11.	26.	0.	0.	0.	-15.	0.	0.	0.	0.	0.
66*) Telecommunications, exc. radio & TV	199.	403.	0.	0.	0.	-204.	0.	0.	0.	0.	0.
67*) Radio, TV, CATV	17.	59.	0.	0.	0.	-41.	0.	0.	0.	0.	0.
69*) Trade margin on info goods	383.	508.	0.	0.	0.	-125.	0.	0.	0.	0.	0.
70*) Finance & insurance: components	1065.	1200.	0.	0.	0.	-135.	0.	0.	0.	0.	0.
71*) Real estate:fees,royalties,office rentals	386.	527.	0.	0.	0.	-141.	0.	0.	0.	0.	0.
72*) Repair: radio & TV equipment	35.	39.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
73*) Misc business info services	253.	869.	0.	0.	0.	-616.	0.	0.	0.	0.	0.
76*) Motion pictures	58.	110.	0.	0.	0.	-52.	0.	0.	0.	0.	0.
77*) Medical, educational, nonprofit	435.	631.	0.	0.	0.	-196.	0.	0.	0.	0.	0.
78*) Postal service	27.	94.	0.	0.	0.	-67.	0.	0.	0.	0.	0.
82*) Office Supplies	4.	45.	0.	0.	0.	-41.	0.	0.	0.	0.	0.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	759.	804.	0.	0.	0.	-45.	0.	0.	0.	0.	0.
2) Other agricultural products	607.	653.	0.	0.	0.	-47.	0.	0.	0.	0.	0.
3) Forestry and fishery products	27.	39.	0.	0.	0.	-11.	0.	0.	0.	0.	0.
4) Agr., Forest, Fish Services	52.	59.	0.	0.	0.	-7.	0.	0.	0.	0.	0.
5) Iron & ferroalloy ores mining	-3.	15.	0.	0.	0.	-18.	0.	0.	0.	0.	0.
6) Nonferrous metal ores mining	-33.	12.	0.	0.	0.	-45.	0.	0.	0.	0.	0.
7) Coal mining	8.	46.	0.	0.	0.	-38.	0.	0.	0.	0.	0.
8) Crude petroleum and natural gas	119.	298.	0.	0.	0.	-179.	0.	0.	0.	0.	0.
9) Stone & clay mining & quarrying	1.	18.	0.	0.	0.	-17.	0.	0.	0.	0.	0.
10) Chemical & fertilizer mineral min.	-4.	12.	0.	0.	0.	-17.	0.	0.	0.	0.	0.
11) New construction, Ne	-176	0.	0.	0.	0.	-176.	0.	0.	0.	0.	0.
12) Maintenance & repair construction	-1.	266.	0.	0.	0.	-267.	0.	0.	0.	0.	0.
13) Ordnance and accessories	-1437.	16.	0.	0.	0.	-1452.	0.	0.	0.	0.	0.
14) Food & kindred products	2255.	2384.	0.	0.	0.	-130.	0.	0.	0.	0.	0.
15) Tobacco manufactures	196.	199.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
16) Fabrics, yarn & thread mills	265.	381.	0.	0.	0.	-116.	0.	0.	0.	0.	0.
17) Misc. textile goods & floor cover.	65.	97.	0.	0.	0.	-33.	0.	0.	0.	0.	0.
18) Apparel	580.	620.	0.	0.	0.	-40.	0.	0.	0.	0.	0.
19) Misc. fabricated textile products	18.	96.	0.	0.	0.	-78.	0.	0.	0.	0.	0.
20) Lumber, wood prod. exc. containers	-2.	103.	0.	0.	0.	-105.	0.	0.	0.	0.	0.

TABLE 21: TOTAL NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
21) Wooden containers	1.	10.	0.	0.	0.	-9.	0.	0.	0.	0.	0.
22) Household furniture	90.	119.	0.	0.	0.	-30.	0.	0.	0.	0.	0.
23) Other furniture, fixtures, Net	-3.	7.	0.	0.	0.	-10.	0.	0.	0.	0.	0.
24) Paper, allied prod. exc containers, Net	132.	243.	0.	0.	0.	-111.	0.	0.	0.	0.	0.
25) Paperboard containers, boxes	63.	124.	0.	0.	0.	-61.	0.	0.	0.	0.	0.
26) Printing & publishing, Net	9.	32.	0.	0.	0.	-23.	0.	0.	0.	0.	0.
27) Chemicals, select Chem products, Net	-184.	339.	0.	0.	0.	-524.	0.	0.	0.	0.	0.
28) Plastics, synthetic materials	37.	146.	0.	0.	0.	-110.	0.	0.	0.	0.	0.
29) Drugs, Cleaning, Toilet preparations	253.	304.	0.	0.	0.	-51.	0.	0.	0.	0.	0.
30) Paints & allied products	5.	37.	0.	0.	0.	-33.	0.	0.	0.	0.	0.
31) Petroleum refining & related ind's	176.	535.	0.	0.	0.	-360.	0.	0.	0.	0.	0.
32) Rubber & misc plastics products	43.	242.	0.	0.	0.	-199.	0.	0.	0.	0.	0.
33) Leather tanning, ind. leather prods.	24.	28.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
34) Footwear & other leather products	113.	119.	0.	0.	0.	-6.	0.	0.	0.	0.	0.
35) Glass & glass products	32.	70.	0.	0.	0.	-38.	0.	0.	0.	0.	0.
36) Stone & clay products	-19.	56.	0.	0.	0.	-75.	0.	0.	0.	0.	0.
37) Primary iron & steel manufacturing	-335.	278.	0.	0.	0.	-612.	0.	0.	0.	0.	0.
38) Primary nonferrous metal manufacturing	-313.	154.	0.	0.	0.	-467.	0.	0.	0.	0.	0.
39) Metal containers	56.	76.	0.	0.	0.	-20.	0.	0.	0.	0.	0.
40) Heating, plumbing & struc metal prods.	-62.	39.	0.	0.	0.	-101.	0.	0.	0.	0.	0.
41) Stamping,screw mach. prods & bolts	-60.	127.	0.	0.	0.	-187.	0.	0.	0.	0.	0.
42) Other fabricated metal products	-82.	141.	0.	0.	0.	-223.	0.	0.	0.	0.	0.
43) Engines and turbines	-94.	20.	0.	0.	0.	-115.	0.	0.	0.	0.	0.
44) Farm machinery & equipment	-1.	13.	0.	0.	0.	-14.	0.	0.	0.	0.	0.
45) Const., mining & oil field machs.	-70.	16.	0.	0.	0.	-86.	0.	0.	0.	0.	0.
46) Materials handling mach & equipment	-20.	7.	0.	0.	0.	-27.	0.	0.	0.	0.	0.
47) Metalworking mach & equipment	-98.	41.	0.	0.	0.	-139.	0.	0.	0.	0.	0.
48) Spec ind mach & equipment, Not	-1.	18.	0.	0.	0.	-20.	0.	0.	0.	0.	0.
49) General ind mach & equipment	-101.	39.	0.	0.	0.	-140.	0.	0.	0.	0.	0.
50) Machine shop products	-114.	36.	0.	0.	0.	-150.	0.	0.	0.	0.	0.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	-4.	36.	0.	0.	0.	-40.	0.	0.	0.	0.	0.
53) Elec ind equip & apparatus, Net	-142.	43.	0.	0.	0.	-184.	0.	0.	0.	0.	0.
54) Household appliances	101.	120.	0.	0.	0.	-19.	0.	0.	0.	0.	0.
55) Electric lighting & wiring equip.	-5.	41.	0.	0.	0.	-46.	0.	0.	0.	0.	0.
56) Radio, television & comm. eqpip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc,elec machinery, Net	-24.	44.	0.	0.	0.	-68.	0.	0.	0.	0.	0.
59) Motor vehicles & equipment	407.	712.	0.	0.	0.	-305.	0.	0.	0.	0.	0.
60) Aircraft and parts	-2228.	22.	0.	0.	0.	-2250.	0.	0.	0.	0.	0.
61) Other transportation equipment	-255.	45.	0.	0.	0.	-300.	0.	0.	0.	0.	0.
62) Scientific & controlling instru.	-10.	20.	0.	0.	0.	-30.	0.	0.	0.	0.	0.
63) Optical, ophthalmic&photo equip, Net	6.	11.	0.	0.	0.	-5.	0.	0.	0.	0.	0.
64) Misc manufacturing, Net	143.	176.	0.	0.	0.	-33.	0.	0.	0.	0.	0.
65) Transportation & warehousing	-120.	867.	0.	0.	0.	-987.	0.	0.	0.	0.	0.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	564.	83.	0.	0.	0.	-271.	0.	0.	0.	0.	0.
69) Wholesale & retail trade, Net	2778.	334.	0.	0.	0.	-568.	0.	0.	0.	0.	0.
70) Finance & insurance, Net	28.	3.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
71) Real estate & rental, Net	2101.	2341.	0.	0.	0.	-240.	0.	0.	0.	0.	0.
72) Hotels:personal&rep svcs exc auto,Net	355.	506.	0.	0.	0.	-151.	0.	0.	0.	0.	0.
73) Business services, Net	-75.	150.	0.	0.	0.	-224.	0.	0.	0.	0.	0.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & services	288.	360.	0.	0.	0.	-72.	0.	0.	0.	0.	0.
76) Amusements, Net	105.	130.	0.	0.	0.	-25.	0.	0.	0.	0.	0.
77) Medical,educ svcs&non-profit org, Net	580.	624.	0.	0.	0.	-44.	0.	0.	0.	0.	0.

TABLE 21: TOTAL NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components) - *(Cont'd)*

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
78) Federal govt enterprises, Net	47.	71.	0.	0.	0.	-24.	0.	0.	0.	0.	0.
79) State & local govt enterprises	135.	209.	0.	0.	0.	-74.	0.	0.	0.	0.	0.
80) Imports	-296.	654.	0.	0.	0.	-950.	0.	0.	0.	0.	0.
81) Business travel, entertainment & gifts	43.	201.	0.	0.	0.	-158.	0.	0.	0.	0.	0.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL NON-INFORMATION	7294.	21135.	0.	0.	0.	-13839.	0.	0.	0.	0.	0.
TOTAL INFORMATION	1267.	5438.	0.	0.	0.	-4171.	0.	0.	0.	0.	0.
TOTAL	8564.	26573.	0.	0.	0.	-18010.	0.	0.	0.	0.	0.

TABLE 22: DIRECT NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	-19.	0.	0.	0.	0.	-19.	0.	0.	0.	0.	0.
12*) Maintenance & repair on info buildings	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
23*) Office furniture & equipment	-2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.
24*) Paper: printing (exc boxes)	-2.	2.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
26*) Printing & publishing	102.	134.	0.	0.	0.	-33.	0.	0.	0.	0.	0.
27*) Ink	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
48*) Printing & paper machinery	-2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.
51*) Computers,calculators,office equip.	-52.	4.	0.	0.	0.	-56.	0.	0.	0.	0.	0.
53*) Electronic measuring instruments	-43.	0.	0.	0.	0.	-43.	0.	0.	0.	0.	0.
56*) Radio, TV, comm'n equipment	-1001.	114.	0.	0.	0.	-1115.	0.	0.	0.	0.	0.
57*) Electronic components	-140.	6.	0.	0.	0.	-146.	0.	0.	0.	0.	0.
58*) Misc electronic instruments	-2.	0.	0.	0.	0.	-2.	0.	0.	0.	0.	0.
62*) Mech measuring & control instruments	-91.	13.	0.	0.	0.	-104.	0.	0.	0.	0.	0.
63*) Photographic & related equipment	-50.	22.	0.	0.	0.	-73.	0.	0.	0.	0.	0.
64*) Advertising signs & displays	6.	6.	0.	0.	0.	-0.	0.	0.	0.	0.	0.
66*) Telecommunications, exc. radio & TV	148.	230.	0.	0.	0.	-82.	0.	0.	0.	0.	0.
67*) Radio, TV, CATV	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
69*) Trade margin on info goods	350.	396.	0.	0.	0.	-46.	0.	0.	0.	0.	0.
70*) Finance & insurance: components	871.	876.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
71*) Real estate:fees,royalties,office rentals	224.	234.	0.	0.	0.	-10.	0.	0.	0.	0.	0.
72*) Repair: radio & TV equipment	32.	32.	0.	0.	0.	-0.	0.	0.	0.	0.	0.
73*) Misc business info services	-139.	129.	0.	0.	0.	-268.	0.	0.	0.	0.	0.
76*) Motion pictures	44.	77.	0.	0.	0.	-33.	0.	0.	0.	0.	0.
77*) Medical, educational, nonprofit	421.	601.	0.	0.	0.	-181.	0.	0.	0.	0.	0.
78*) Postal service	-7.	31.	0.	0.	0.	-37.	0.	0.	0.	0.	0.
82*) Office Supplies	-20.	0.	0.	0.	0.	-20.	0.	0.	0.	0.	0.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	68.	69.	0.	0.	0.	-1.	0.	0.	0.	0.	0.
2) Other agricultural products	115.	117.	0.	0.	0.	-2.	0.	0.	0.	0.	0.
3) Forestry and fishery products	12.	13.	0.	0.	0.	-1.	0.	0.	0.	0.	0.
4) Agr., Forest, Fish Services	2.	4.	0.	0.	0.	-2.	0.	0.	0.	0.	0.
5) Iron & ferroalloy ores mining	14.	0.	0.	0.	0.	14.	0.	0.	0.	0.	0.
6) Nonferrous metal ores mining	-13.	0.	0.	0.	0.	-13.	0.	0.	0.	0.	0.
7) Coal mining	-4.	4.	0.	0.	0.	-8.	0.	0.	0.	0.	0.
8) Crude petroleum and natural gas	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
9) Stone & clay mining & quarrying	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
10) Chemical & fertilizer mineral min.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
11) New construction, Net	-176.	0.	0.	0.	0.	-176.	0.	0.	0.	0.	0.
12) Maintenance & repair construction	-195.	0.	0.	0.	0.	-195.	0.	0.	0.	0.	0.
13) Ordnance and accessories	-1384.	10.	0.	0.	0.	-1394.	0.	0.	0.	0.	0.
14) Food & kindred products	2176.	2228.	0.	0.	0.	-52.	0.	0.	0.	0.	0.
15) Tobacco manufactures	194.	194.	0.	0.	0.	0.	0.	0.	0.	0.	0.
16) Fabrics, yarn & thread mills	4.	26.	0.	0.	0.	-22.	0.	0.	0.	0.	0.
17) Misc. textile goods & floor cover.	41.	44.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
18) Apparel	572.	597.	0.	0.	0.	-24.	0.	0.	0.	0.	0.
19) Misc. fabricated textile products	-7.	59.	0.	0.	0.	-66.	0.	0.	0.	0.	0.
20) Lumber, wood prod. exc. containers	4.	10.	0.	0.	0.	-6.	0.	0.	0.	0.	0.

TABLE 22: DIRECT NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
21) Wooden containers	-4.	0.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
22) Household furniture	109.	114.	0.	0.	0.	-5.	0.	0.	0.	0.	0.
23) Other furniture, fixtures, Net	-1.	5.	0.	0.	0.	-6.	0.	0.	0.	0.	0.
24) Paper, allied prod. exc containers, Net	38.	49.	0.	0.	0.	-11.	0.	0.	0.	0.	0.
25) Paperboard containers, boxes	-4.	2.	0.	0.	0.	-6.	0.	0.	0.	0.	0.
26) Printing & publishing, Net	-6.	1.	0.	0.	0.	-7.	0.	0.	0.	0.	0.
27) Chemicals, select Chem products, Net	-307.	19.	0.	0.	0.	-325.	0.	0.	0.	0.	0.
28) Plastics, synthetic materials	-13.	1.	0.	0.	0.	-14.	0.	0.	0.	0.	0.
29) Drugs, Cleaning, Toilet preparations	199.	225.	0.	0.	0.	-26.	0.	0.	0.	0.	0.
30) Paints & allied products	1.	2.	0.	0.	0.	-1.	0.	0.	0.	0.	0.
31) Petroleum refining & related ind's	118.	322.	0.	0.	0.	-204.	0.	0.	0.	0.	0.
32) Rubber & misc plastics products	-5.	70.	0.	0.	0.	-75.	0.	0.	0.	0.	0.
33) Leather tanning, ind. leather prods.	-1.	0.	0.	0.	0.	-1.	0.	0.	0.	0.	0.
34) Footwear & other leather products	107.	109.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
35) Glass & glass products	8.	10.	0.	0.	0.	-2.	0.	0.	0.	0.	0.
36) Stone & clay products	3.	8.	0.	0.	0.	-5.	0.	0.	0.	0.	0.
37) Primary iron & steel manufacturing	-73.	0.	0.	0.	0.	-73.	0.	0.	0.	0.	0.
38) Primary nonferrous metal manufacturing	-12.	1.	0.	0.	0.	-13.	0.	0.	0.	0.	0.
39) Metal containers	-3.	0.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
40) Heating, plumbing & struc metal prods.	-35.	2.	0.	0.	0.	-37.	0.	0.	0.	0.	0.
41) Stamping,screw mach. prods & bolts	-11.	11.	0.	0.	0.	-22.	0.	0.	0.	0.	0.
42) Other fabricated metal products	-24.	24.	0.	0.	0.	-48.	0.	0.	0.	0.	0.
43) Engines and turbines	-75.	5.	0.	0.	0.	-80.	0.	0.	0.	0.	0.
44) Farm machinery & equipment	-4.	1.	0.	0.	0.	-5.	0.	0.	0.	0.	0.
45) Const., mining & oil field machs.	-63.	0.	0.	0.	0.	-63.	0.	0.	0.	0.	0.
46) Materials handling mach & equipment	-17.	0.	0.	0.	0.	-17.	0.	0.	0.	0.	0.
47) Metalworking mach & equipment	-22.	3.	0.	0.	0.	-25.	0.	0.	0.	0.	0.
48) Spec ind mach & equipment, Net	-4.	1.	0.	0.	0.	-5.	0.	0.	0.	0.	0.
49) General ind mach & equipment	-53.	0.	0.	0.	0.	-53.	0.	0.	0.	0.	0.
50) Machine shop products	-21.	0.	0.	0.	0.	-21.	0.	0.	0.	0.	0.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	-8.	13.	0.	0.	0.	-21.	0.	0.	0.	0.	0.
53) Elec ind equip & apparatus, Net	-102.	1.	0.	0.	0.	-103.	0.	0.	0.	0.	0.
54) Household appliances	103.	105.	0.	0.	0.	-2.	0.	0.	0.	0.	0.
55) Electric lighting & wiring equip.	10.	17.	0.	0.	0.	-7.	0.	0.	0.	0.	0.
56) Radio, television & comm. equip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc elec machinery, Net	-20.	19.	0.	0.	0.	-40.	0.	0.	0.	0.	0.
59) Motor vehicles & equipment	407.	644.	0.	0.	0.	-237.	0.	0.	0.	0.	0.
60) Aircraft and parts	-1999.	2.	0.	0.	0.	-2000.	0.	0.	0.	0.	0.
61) Other transportation equipment	-249.	33.	0.	0.	0.	-282.	0.	0.	0.	0.	0.
62) Scientific & controlling instru.	-16.	5.	0.	0.	0.	-22.	0.	0.	0.	0.	0.
63) Optical, ophthalmic&photo equip, Net	7.	10.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
64) Misc manufacturing, Net	119.	132.	0.	0.	0.	-12.	0.	0.	0.	0.	0.
65) Transportation & warehousing	-302.	373.	0.	0.	0.	-675.	0.	0.	0.	0.	0.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	435.	510.	0.	0.	0.	-74.	0.	0.	0.	0.	0.
69) Wholesale & retail trade, Net	2676.	2864.	0.	0.	0.	-187.	0.	0.	0.	0.	0.
70) Finance & insurance, Net	20.	20.	0.	0.	0.	0.	0.	0.	0.	0.	0.
71) Real estate & rental, Net	1863.	1880.	0.	0.	0.	-17.	0.	0.	0.	0.	0.
72) Hotels:personal&rep svcs exc auto,Net	325.	430.	0.	0.	0.	-105.	0.	0.	0.	0.	0.
73) Business services, Net	-110.	13.	0.	0.	0.	-124.	0.	0.	0.	0.	0.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & services	225.	236.	0.	0.	0.	-11.	0.	0.	0.	0.	0.
76) Amusements, Net	98.	116.	0.	0.	0.	-18.	0.	0.	0.	0.	0.
77) Medical,educ svcs&non-profit org, Net	566.	603.	0.	0.	0.	-37.	0.	0.	0.	0.	0.

TABLE 22: DIRECT NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
78) Federal govt enterprises, Net	-3.	5.	0.	0.	0.	-8.	0.	0.	0.	0.	0.
79) State & local govt enterprises	26.	28.	0.	0.	0.	-1.	0.	0.	0.	0.	0.
80) Imports	-288.	287.	0.	0.	0.	-575.	0.	0.	0.	0.	0.
81) Business travel, entertainment & gifts	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL NON-INFORMATION	5030.	12705.	0.	0.	0.	-7674.	0.	0.	0.	0.	0.
TOTAL INFORMATION	628.	2907.	0.	0.	0.	-2279.	0.	0.	0.	0.	0.
TOTAL	5658.	15612.	0.	0.	0.	-9953.	0.	0.	0.	0.	0.

TABLE 23: INDIRECT NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12*) Maintenance & repair on info buildings	52.	123.	0.	0.	0.	-71.	0.	0.	0.	0.	0.
23*) Office furniture & equipment	-3.	2.	0.	0.	0.	-5.	0.	0.	0.	0.	0.
24*) Paper: printing (exc boxes)	41.	82.	0.	0.	0.	-41.	0.	0.	0.	0.	0.
26*) Printing & publishing	100.	274.	0.	0.	0.	-173.	0.	0.	0.	0.	0.
27*) Ink	3.	7.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
48*) Printing & paper machinery	1.	2.	0.	0.	0.	-1.	0.	0.	0.	0.	0.
51*) Computers,calculators,office equip.	-6.	15.	0.	0.	0.	-21.	0.	0.	0.	0.	0.
53*) Electronic measuring instruments	-15.	3.	0.	0.	0.	-18.	0.	0.	0.	0.	0.
56*) Radio, TV, comm'n equipment	-111.	22.	0.	0.	0.	-133.	0.	0.	0.	0.	0.
57*) Electronic components	-308.	54.	0.	0.	0.	-362.	0.	0.	0.	0.	0.
58*) Misc electronic instruments	-0.	1.	0.	0.	0.	-1.	0.	0.	0.	0.	0.
62*) Mech measuring & control instruments	-54.	17.	0.	0.	0.	-71.	0.	0.	0.	0.	0.
63*) Photographic & related equipment	-3.	30.	0.	0.	0.	-32.	0.	0.	0.	0.	0.
64*) Advertising signs & displays	5.	20.	0.	0.	0.	-15.	0.	0.	0.	0.	0.
66*) Telecommunications, exc. radio & TV	51.	173.	0.	0.	0.	-122.	0.	0.	0.	0.	0.
67*) Radio, TV, CATV	17.	59.	0.	0.	0.	-41.	0.	0.	0.	0.	0.
69*) Trade margin on info goods	33.	112.	0.	0.	0.	-79.	0.	0.	0.	0.	0.
70*) Finance & insurance: components	193.	324.	0.	0.	0.	-131.	0.	0.	0.	0.	0.
71*) Real estate:fees,royalties,office rentals	162.	294.	0.	0.	0.	-132.	0.	0.	0.	0.	0.
72*) Repair: radio & TV equipment	3.	7.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
73*) Misc business info services	392.	740.	0.	0.	0.	-348.	0.	0.	0.	0.	0.
76*) Motion pictures	13.	32.	0.	0.	0.	-19.	0.	0.	0.	0.	0.
77*) Medical, educational, nonprofit	14.	30.	0.	0.	0.	-16.	0.	0.	0.	0.	0.
78*) Postal service	34.	64.	0.	0.	0.	-30.	0.	0.	0.	0.	0.
82*) Office Supplies	24.	45.	0.	0.	0.	-21.	0.	0.	0.	0.	0.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	692.	736.	0.	0.	0.	-44.	0.	0.	0.	0.	0.
2) Other agricultural products	492.	537.	0.	0.	0.	-45.	0.	0.	0.	0.	0.
3) Forestry and fishery products	15.	25.	0.	0.	0.	-10.	0.	0.	0.	0.	0.
4) Agr., Forest, Fish Services	50.	55.	0.	0.	0.	-5.	0.	0.	0.	0.	0.
5) Iron & ferroalloy ores mining	-17.	15.	0.	0.	0.	-32.	0.	0.	0.	0.	0.
6) Nonferrous metal ores mining	-19.	12.	0.	0.	0.	-31.	0.	0.	0.	0.	0.
7) Coal mining	12.	42.	0.	0.	0.	-29.	0.	0.	0.	0.	0.
8) Crude petroleum and natural gas	119.	298.	0.	0.	0.	-179.	0.	0.	0.	0.	0.
9) Stone & clay mining & quarrying	[illegible]	18.	0.	0.	0.	-18.	0.	0.	0.	0.	0.
10) Chemical & fertilizer mineral min.	-5.	12.	0.	0.	0.	-17.	0.	0.	0.	0.	0.
11) New construction, Net	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12) Maintenance & repair construction	194.	266.	0.	0.	0.	-71.	0.	0.	0.	0.	0.
13) Ordnance and accessories	-52.	5.	0.	0.	0.	-58.	0.	0.	0.	0.	0.
14) Food & kindred products	79.	156.	0.	0.	0.	-78.	0.	0.	0.	0.	0.
15) Tobacco manufactures	1.	5.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
16) Fabrics, yarn & thread mills	262.	355.	0.	0.	0.	-94.	0.	0.	0.	0.	0.
17) Misc. textile goods & floor cover.	24.	53.	0.	0.	0.	-30.	0.	0.	0.	0.	0.
18) Apparel	8.	23.	0.	0.	0.	-15.	0.	0.	0.	0.	0.
19) Misc. fabricated textile products	25.	37.	0.	0.	0.	-12.	0.	0.	0.	0.	0.
20) Lumber, wood prod. exc. containers	-6.	92.	0.	0.	0.	-99.	0.	0.	0.	0.	0.

TABLE 23: INDIRECT NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
21) Wooden containers	6.	10.	0.	0.	0.	-5.	0.	0.	0.	0.	0.
22) Household furniture	-19.	5.	0.	0.	0.	-24.	0.	0.	0.	0.	0.
23) Other furniture, fixtures, Net	-2.	2.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
24) Paper, allied prod. exc containers, Net	94.	194.	0.	0.	0.	-100.	0.	0.	0.	0.	0.
25) Paperboard containers, boxes	67.	122.	0.	0.	0.	-55.	0.	0.	0.	0.	0.
26) Printing & publishing, Net	15.	30.	0.	0.	0.	-16.	0.	0.	0.	0.	0.
27) Chemicals, select Chem products, Net	122.	321.	0.	0.	0.	-198.	0.	0.	0.	0.	0.
28) Plastics, synthetic materials	50.	146.	0.	0.	0.	-96.	0.	0.	0.	0.	0.
29) Drugs, Cleaning, Toilet preparations	53.	79.	0.	0.	0.	-25.	0.	0.	0.	0.	0.
30) Paints & allied products	4.	36.	0.	0.	0.	-32.	0.	0.	0.	0.	0.
31) Petroleum refining & related ind's	58.	214.	0.	0.	0.	-156.	0.	0.	0.	0.	0.
32) Rubber & misc plastics products	48.	173.	0.	0.	0.	-124.	0.	0.	0.	0.	0.
33) Leather tanning, ind. leather prods.	25.	28.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
34) Footwear & other leather products	6.	10.	0.	0.	0.	-4.	0.	0.	0.	0.	0.
35) Glass & glass products	24.	60.	0.	0.	0.	-36.	0.	0.	0.	0.	0.
36) Stone & clay products	-22.	48.	0.	0.	0.	-70.	0.	0.	0.	0.	0.
37) Primary iron & steel manufacturing	-262.	277.	0.	0.	0.	-539.	0.	0.	0.	0.	0.
38) Primary nonferrous metal manufacturing	-301.	153.	0.	0.	0.	-454.	0.	0.	0.	0.	0.
39) Metal containers	58.	76.	0.	0.	0.	-18.	0.	0.	0.	0.	0.
40) Heating, plumbing & struc metal prods.	-27.	37.	0.	0.	0.	-64.	0.	0.	0.	0.	0.
41) Stamping,screw mach. prods & bolts	-49.	115.	0.	0.	0.	-164.	0.	0.	0.	0.	0.
42) Other fabricated metal products	-58.	117.	0.	0.	0.	-175.	0.	0.	0.	0.	0.
43) Engines and turbines	-19.	16.	0.	0.	0.	-35.	0.	0.	0.	0.	0.
44) Farm machinery & equipment	3.	12.	0.	0.	0.	-9.	0.	0.	0.	0.	0.
45) Const., mining & oil field machs.	-7.	16.	0.	0.	0.	-23.	0.	0.	0.	0.	0.
46) Materials handling mach & equipment	-3.	7.	0.	0.	0.	-10.	0.	0.	0.	0.	0.
47) Metalworking mach & equipment	-76.	39.	0.	0.	0.	-114.	0.	0.	0.	0.	0.
48) Spec ind mach & equipment, Net	3.	18.	0.	0.	0.	-15.	0.	0.	0.	0.	0.
49) General ind mach & equipment	-49.	39.	0.	0.	0.	-88.	0.	0.	0.	0.	0.
50) Machine shop products	-93.	36.	0.	0.	0.	-129.	0.	0.	0.	0.	0.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	4.	24.	0.	0.	0.	-19.	0.	0.	0.	0.	0.
53) Elec ind equip & apparatus, Net	-39.	42.	0.	0.	0.	-81.	0.	0.	0.	0.	0.
54) Household appliances	-2.	16.	0.	0.	0.	-17.	0.	0.	0.	0.	0.
55) Electric lighting & wiring equip.	-15.	24.	0.	0.	0.	-38.	0.	0.	0.	0.	0.
56) Radio, television & comm. eqoip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc elec machinery, Net	-3.	25.	0.	0.	0.	-28.	0.	0.	0.	0.	0.
59) Motor vehicles & equipment	0.	68.	0.	0.	0.	-68.	0.	0.	0.	0.	0.
60) Aircraft and parts	-229.	21.	0.	0.	0.	-250.	0.	0.	0.	0.	0.
61) Other transportation equipment	-5.	12.	0.	0.	0.	-17.	0.	0.	0.	0.	0.
62) Scientific & controlling instru.	6.	14.	0.	0.	0.	-8.	0.	0.	0.	0.	0.
63) Optical, ophthalmic&photo equip, Net	-1.	1.	0.	0.	0.	-2.	0.	0.	0.	0.	0.
64) Misc manufacturing, Net	24.	45.	0.	0.	0.	-21.	0.	0.	0.	0.	0.
65) Transportation & warehousing	182.	493.	0.	0.	0.	-312.	0.	0.	0.	0.	0.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	128.	325.	0.	0.	0.	-197.	0.	0.	0.	0.	0.
69) Wholesale & retail trade, Net	102.	482.	0.	0.	0.	-380.	0.	0.	0.	0.	0.
70) Finance & insurance, Net	8.	11.	0.	0.	0.	-3.	0.	0.	0.	0.	0.
71) Real estate & rental, Net	238.	461.	0.	0.	0.	-224.	0.	0.	0.	0.	0.
72) Hotels:personal&rep svcs exc auto,Net	30.	76.	0.	0.	0.	-46.	0.	0.	0.	0.	0.
73) Business services, Net	36.	137.	0.	0.	0.	-101.	0.	0.	0.	0.	0.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & services	63.	124.	0.	0.	0.	-61.	0.	0.	0.	0.	0.
76) Amusements, Net	7.	13.	0.	0.	0.	-6.	0.	0.	0.	0.	0.
77) Medical,educ svcs&non-profit org, Net	14.	21.	0.	0.	0.	-7.	0.	0.	0.	0.	0.

TABLE 23: INDIRECT NET OUTPUT IMPACT OF EXPERIMENT I (By Final Demand Components) - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
78) Federal govt enterprises, Net	49.	66.	0.	0.	0.	-17.	0.	0.	0.	0.	0.
79) State & local govt enterprises	109.	182.	0.	0.	0.	-72.	0.	0.	0.	0.	0.
80) Imports	-7.	367.	0.	0.	0.	-375.	0.	0.	0.	0.	0.
81) Business travel, entertainment & gifts	43.	201.	0.	0.	0.	-158.	0.	0.	0.	0.	0.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL NON-INFORMATION	2265.	8431.	0.	0.	0.	-6165.	0.	0.	0.	0.	0.
TOTAL INFORMATION	640.	2531.	0.	0.	0.	-1892.	0.	0.	0.	0.	0.
TOTAL	2905.	10962.	0.	0.	0.	-8057.	0.	0.	0.	0.	0.

TABLE 24: FINAL DEMAND COMPONENTS OF EXPERIMENTAL ECONOMY II

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
INFORMATION INDUSTRIES											
11*) Info buildings: office,education,comm.	17855.	0.	11348.	0.	15.	94.	225.	5430.	0.	266.	477.
12*) Maintenance & repair on info buildings	1424.	0.	0.	0.	0.	0.	186.	764.	150.	71.	252.
23*) Office furniture & equipment	1592.	0.	1298.	20.	11.	12.	32.	161.	4.	1.	54.
24*) Paper: printing (exc boxes)	366.	50.	0.	107.	82.	15.	23.	40.	16.	3.	29.
26*) Printing & publishing	5599.	4072.	0.	274.	244.	144.	32.	715.	11.	3.	105.
27*) Ink	17.	0.	0.	5.	10.	0.	1.	1.	0.	0.	0.
48*) Printing & paper machinery	1397.	0.	1226.	35.	114.	8.	9.	6.	0.	0.	0.
51*) Computers,calculators,office equip.	8375.	112.	6704.	155.	710.	242.	291.	118.	10.	1.	31.
53*) Electronic measuring instruments	1715.	0.	1258.	20.	166.	208.	50.	2.	0.	1.	9.
56*) Radio, TV, comm'n equipment	16658.	3646.	5874.	600.	580.	5179.	657.	93.	3.	14.	11.
57*) Electronic components	1453.	171.	37.	139.	372.	617.	103.	4.	0.	8.	1.
58*) Misc electronic instruments	328.	0.	267.	7.	29.	9.	2.	2.	12.	0.	0.
62*) Mech measuring & control instruments	2815.	415.	1229.	78.	461.	479.	83.	17.	34.	4.	15.
63*) Photographic & related equipment	3499.	713.	1840.	78.	313.	340.	70.	65.	56.	4.	18.
64*) Advertising signs & displays	758.	204.	483.	18.	35.	1.	1.	23.	0.	-8.	1.
66*) Telecommunications, exc. radio & TV	11186.	7837.	2191.	0.	140.	405.	138.	136.	44.	43.	253.
67*) Radio, TV, CATV	7.	0.	0.	0.	0.	0.	0.	7.	0.	0.	0.
69*) Trade margin on info goods	16567.	13531.	2028.	101.	516.	230.	50.	25.	41.	12.	31.
70*) Finance & insurance: components	25117.	24596.	8.	-1.	90.	17.	36.	172.	39.	7.	151.
71*) Real estate:fees,royalties,office rentals	9948.	7842.	1556.	0.	214.	48.	60.	62.	40.	9.	118.
72*) Repair: radio & TV equipment	1112.	1105.	0.	0.	0.	1.	-0.	2.	3.	1.	1.
73*) Misc business info services	7471.	4142.	0.	0.	408.	1254.	586.	430.	286.	66.	300.
76*) Motion pictures	2154.	1744.	0.	-57.	322.	109.	5.	24.	0.	2.	4.
77*) Medical, educational, nonprofit	23027.	20629.	0.	0.	0.	901.	1000.	101.	323.	32.	41.
78*) Postal service	1499.	1053.	0.	0.	14.	187.	46.	23.	65.	9.	101.
82*) Office Supplies	470.	0.	0.	0.	0.	99.	77.	143.	30.	14.	107.
NON-INFORMATION INDUSTRIES											
1) Livestock & products	2018.	1811.	0.	129.	55.	5.	4.	1.	10.	1.	2.
2) Other agricultural products	5849.	3756.	0.	1031.	3184.	7.	-1202.	16.	9.	4.	43.
3) Forestry and fishery products	249.	449.	0.	2.	47.	5.	-259.	1.	2.	1.	1.
4) Agr., Forest, Fish Services	184.	136.	0.	0.	14.	10.	1.	16.	1.	1.	5.
5) Iron & ferroalloy ores mining	82.	0.	0.	25.	122.	-65.	-0.	0.	0.	0.	0.
6) Nonferrous metal ores mining	173.	0.	0.	12.	35.	58.	67.	0.	0.	0.	0.
7) Coal mining	618.	121.	0.	125.	306.	36.	7.	15.	1.	1.	4.
8) Crude petroleum and natural gas	339.	0.	0.	257.	82.	0.	0.	0.	0.	0.	0.
9) Stone & clay mining & quarrying	51.	4.	0.	12.	83.	-1.	-1.	0.	0.	0.	-46.
10) Chemical & fertilizer mineral min.	189.	2.	0.	8.	148.	-0.	0.	0.	0.	0.	31.
11) New construction, Net	58111.	0.	39067.	0.	0.	881.	2275.	746.	1708.	0.	13434.
12) Maintenance & repair construction	4271.	0.	0.	0.	0.	973.	294.	7.	0.	0.	2997.
13) Ordnance and accessories	9071.	322.	20.	147.	309.	6432.	1834.	0.	0.	7.	0.
14) Food & kindred products	64911.	60974.	0.	899.	1906.	206.	448.	68.	273.	73.	63.
15) Tobacco manufactures	6059.	5270.	0.	189.	601.	0.	0.	0.	0.	-1.	0.
16) Fabrics, yarn & thread mills	1058.	592.	0.	114.	250.	73.	1.	9.	17.	1.	1.
17) Misc. textile goods & floor cover.	1693.	1405.	71.	107.	89.	14.	6.	0.	0.	-1.	0.
18) Apparel	16867.	16246.	0.	281.	169.	96.	31.	2.	11.	28.	2.
19) Misc. fabricated textile products	2459.	1983.	0.	49.	74.	323.	13.	5.	12.	-5.	5.
20) Lumber, wood prod. exc. containers	786.	258.	5.	121.	367.	22.	8.	3.	0.	0.	0.
21) Wooden containers	30.	0.	0.	2.	3.	21.	3.	0.	0.	0.	0.
22) Household furniture	4151.	3861.	132.	49.	24.	26.	30.	21.	2.	2.	3.
23) Other furniture, fixtures, Net	1114.	174.	789.	20.	8.	28.	18.	73.	2.	-2.	4.
24) Paper, allied prod. exc containers, Net	2308.	1451.	0.	121.	567.	47.	31.	53.	13.	7.	16.
25) Paperboard containers, boxes	191.	73.	0.	39.	24.	29.	5.	12.	6.	2.	1.

TABLE 24: FINAL DEMAND COMPONENTS OF EXPERIMENTAL ECONOMY II - (Cont'd)

($ MILLIONS, 1967)

INDUSTRIES	TFD	PCE	GCF	INV	EXP	DEF	FGP	S&L EDUC	S&L HWS	S&LS	S&LP
26) Printing & publishing, Net	161.	47.	0.	23.	8.	36.	17.	5.	2.	1.	22.
27) Chemicals, select Chem products, Net	4367.	504.	0.	300.	1700.	1286.	464.	13.	31.	2.	65.
28) Plastics, synthetic materials	779.	18.	0.	26.	670.	65.	0.	0.	0.	0.	0.
29) Drugs, Cleaning, Toilet preparations	8669.	7293.	0.	221.	435.	121.	71.	145.	359.	5.	19.
30) Paints & allied products	160.	52.	0.	54.	47.	3.	1.	1.	2.	-2.	1.
31) Petroleum refining & related ind's	12870.	10194.	0.	541.	765.	939.	139.	146.	34.	33.	79.
32) Rubber & misc plastics products	3323.	2269.	24.	142.	323.	354.	37.	44.	41.	44.	43.
33) Leather tanning, ind. leather prods.	43.	0.	0.	-6.	43.	5.	2.	0.	0.	0.	0.
34) Footwear & other leather products	3718.	3659.	0.	21.	20.	14.	2.	0.	1.	2.	0.
35) Glass & glass products	573.	317.	0.	39.	145.	10.	8.	22.	29.	2.	0.
36) Stone & clay products	588.	244.	0.	127.	177.	23.	4.	9.	2.	1.	0.
37) Primary iron & steel manufacturing	1328.	3.	0.	514.	518.	286.	4.	0.	0.	2.	0.
38) Primary nonferrous metal manufacturing	1112.	15.	28.	336.	726.	42.	-34.	0.	0.	0.	0.
39) Metal containers	97.	0.	8.	61.	16.	13.	0.	0.	0.	0.	0.
40) Heating, plumbing & struc metal prods.	1449.	66.	749.	128.	284.	179.	43.	0.	0.	0.	0.
41) Stamping, screw mach. prods & bolts	886.	374.	0.	86.	274.	108.	31.	23.	2.	-14.	1.
42) Other fabricated metal products	1973.	774.	270.	198.	434.	226.	37.	27.	4.	-3.	5.
43) Engines and turbines	1607.	144.	590.	55.	393.	366.	49.	0.	0.	0.	9.
44) Farm machinery & equipment	3287.	38.	2362.	409.	419.	25.	3.	9.	2.	3.	15.
45) Const., mining & oil field machs.	3641.	0.	1950.	58.	1269.	295.	13.	0.	11.	0.	46.
46) Materials handling mach & equipment	1157.	0.	889.	36.	132.	82.	17.	1.	0.	0.	0.
47) Metalworking mach & equipment	3694.	87.	2779.	167.	486.	116.	36.	14.	2.	0.	7.
48) Spec ind mach & equipment, Net	2869.	22.	2081.	56.	677.	24.	5.	5.	0.	0.	0.
49) General ind mach & equipment	2583.	0.	1516.	125.	627.	242.	60.	0.	0.	5.	7.
50) Machine shop products	335.	4.	4.	32.	63.	98.	8.	108.	14.	0.	2.
51) Office comp & accounting machines	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
52) Service industry machines	2506.	404.	1388.	126.	359.	96.	7.	105.	14.	2.	3.
53) Elec ind equip & apparatus, Net	2942.	28.	1812.	112.	391.	471.	69.	16.	2.	0.	39.
54) Household appliances	3930.	3538.	102.	102.	149.	11.	3.	13.	9.	2.	0.
55) Electric lighting & wiring equip.	952.	557.	53.	57.	169.	35.	13.	55.	2.	3.	7.
56) Radio, television & comm. equip	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
57) Electronic components & access.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
58) Misc elec machinery, Net	1071.	626.	61.	28.	132.	187.	25.	2.	1.	3.	6.
59) Motor vehicles & equipment	26490.	15822.	7269.	-310.	1976.	847.	155.	182.	27.	87.	435.
60) Aircraft and parts	14327.	50.	1900.	1918.	1809.	7840.	809.	0.	0.	2.	0.
61) Other transportation equipment	5799.	1077.	2754.	196.	206.	1327.	220.	0.	0.	10.	8.
62) Scientific & controlling instru.	980.	185.	415.	31.	107.	107.	50.	7.	73.	2.	1.
63) Optical, ophthalmic&photo equip, Net	347.	317.	0.	0.	8.	15.	4.	0.	2.	0.	0.
64) Misc manufacturing, Net	5118.	4213.	234.	130.	297.	57.	38.	118.	3.	-6.	32.
65) Transportation & warehousing	20490.	11396.	665.	228.	3891.	2996.	328.	632.	113.	39.	201.
66) Comm. exc radio&TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
67) Radio & TV broadcasting	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
68) Electric,gas,water & sanitary svcs	15952.	13935.	0.	0.	74.	295.	49.	1054.	96.	56.	393.
69) Wholesale & retail trade, Net	104171.	95836.	4439.	407.	2098.	911.	205.	-113.	213.	47.	127.
70) Finance & insurance, Net	705.	672.	0.	0.	0.	0.	0.	0.	0.	0.	34.
71) Real estate & rental, Net	65024.	63027.	1061.	0.	363.	81.	103.	106.	68.	16.	200.
72) Hotels:personal&rep svcs exc auto,Net	15053.	14367.	0.	0.	3.	510.	105.	-161.	62.	23.	144.
73) Business services, Net	1817.	448.	0.	0.	49.	612.	238.	201.	84.	30.	155.
74) (Research and Development)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75) Automobile repair & services	8285.	8069.	0.	0.	0.	55.	9.	43.	20.	23.	68.
76) Amusements, Net	3903.	3827.	0.	0.	9.	87.	-12.	-0.	0.	0.	-8.
77) Medical,educ svcs&non-profit org, Net	22792.	20482.	0.	0.	0.	184.	141.	37.	1913.	8.	26.
78) Federal govt enterprises, Net	342.	170.	0.	0.	92.	38.	10.	4.	10.	1.	16.
79) State & local govt enterprises	1233.	925.	0.	0.	0.	6.	280.	13.	1.	4.	4.
80) Imports	-26526.	9870.	528.	-100.	-40791.	2877.	1087.	0.	1.	0.	2.
81) Business travel, entertainment & gifts	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
82) Office supplies	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	705213.	486717.	113362.	11998.	-4636.	44426.	12337.	12508.	6491.	1117.	20994.

APPENDIX EIGHT

This appendix contains the following backup material to Chapter 8 of Volume 1:

(i) A detailed breakdown of the Federal agencies and offices into primary, secondary and specialized information industries. The scheme was applied to the Federal budget on a line-by-line basis and resulted in the two tables shown in Chapter 8 (see Tables 25, 26 and 27).

(ii) A brief description of how research and development is defined in the National Income Accounts (Table 28).

THE FEDERAL INFORMATION INDUSTRIES

The thousands of bureaus, offices and programs included in the Federal budget (Appendix) were organized conceptually into three categories:

(i) Those which have direct analogs in the primary information sector, discussed in Chapter 3.

(ii) Those which have direct analogs in the secondary information sector, discussed in Chapter 9.

(iii) Those which are unique to the Federal Government.

Table 25 shows 17 Federal primary information industries that have direct SIC analogs. The entries underneath each major SIC industry are simply examples of the types of offices and programs that were included in our accounting scheme.

Table 26 shows the four secondary industries and examples. The "general administrative" categories were residual, containing all managerial costs that could not be explicitly apportioned elsewhere. A check back to Table 8.2 shows that these lump-sum allocations were quite small.

Table 27 shows the information industries special to governments.

RESEARCH AND DEVELOPMENT

There is considerable confusion in the accounts regarding what "research and development" (R&D) actually means, and in fairness to the reader, this definitional controversy should be aired briefly.

The National Science Foundation (NSF) gathers annual statistics on the performance of R&D by industries and governments.[10] The figure used in our accounts follows the NSF definition. The economic censuses, such as the Census of Manufacturing and Business, use somewhat different definitions. The Bureau of Economic Analysis uses yet a third definition.

Most of the difficulty is in identifying which parts of military and N.A.S.A. activities can be considered as R&D. For example, a space launch of an experimental communication satellite contains two elements -- R&D-type expenses associated with the satellite, and a production-line operation associated with the launch. NSF counts the entire activity as R&D on the assumption that all aspects of space exploration or uses of extraterrestrial technology are still experimental in nature.

The nation's R&D expenditures have been arranged in input-output format by the Bureau of Economic Analysis. The basic table employs NSF data, with some minor additions for State and local government R&D. Table 28 shows all R&D performance, whether conducted in-house or purchased from an outside vendor. The table shows that the Federal Government was a major source of funds for R&D, accounting for some $14.5 billion of a total national expenditure of $23.8 billion.

For purposes of computing the Federal R&D purchases from private industry, intramural purchases are deducted, leaving $11.1 billion. Table 8.3 (in Chapter 8) shows Federal purchases as $13.1 billion. The $2 billion difference is explained by the different treatment used by NSF and BEA. Our number is drawn directly from the NSF's Federal Funds for Research, Development and Other Scientific Activities, Vol. XVII, p. 106.

Note that the largest R&D performer is the manufacturing sector, with $15.3 billion in total R&D for 1967. Over half of this amount ($7.9 billion) was internally financed. Both NSF and BEA are vague on their definitions of such R&D. For example, both the basic research associated with developing new technologies and routine product development are included.

Note also that private, state and local universities performed $3 billion in R&D. However, a sizable portion of this amount was used in training graduate students, not in actual research.

Lastly, note that the Federal Government financed $3.4 billion internally. This represents an enormous R&D establishment within the government, outpacing the combined revenues of private R&D and commercial labs by a 2:1 ratio.

The total R&D expenditures in 1967 were $23.8 billion, of which slightly more than half ($12.2 billion) was performed in-house.

TABLE 25:

EXAMPLES OF PRIMARY INDUSTRIES IN THE FEDERAL GOVERNMENT

SIC		
27	Printing and Publishing	
		Government Printing Office
		DOD: Defense Mapping Agency
		HEW: American Printing House for the Blind
		Commerce: National Bureau of Standards; National Technical Information Service
		DOD: printing and reproduction
481,2	Telephone and Telegraph Communication	
		GSA: automated data and telecommunications system; Federal Telecommunications System
		DOD: Advanced Research Projects Agency: ARPANET, AUTOVON
		Civil Defense: warning and detection
		DOD: procurement of telecommunications equipment; allocated communications personnel
		State: telecommunications (prorated)
60	Banking	
		Federal Reserve Board (part)
		Agriculture: Commodity Credity Corporation (subsidy management and administration)
		Treasury: Bureau of the Public Debt; Office of Revenue Sharing
		Interior: Bureau of Indian Affairs trust responsibilities
		Subsidy management: Civil Aeronautics Board, Maritime Administration
61	Credit Agencies	
		Import-Export Bank
		Small Business Administration guaranteed loans (expenses)
		Agriculture: agricultural stabilization and conservation service
		Rural Electrification Administration
		Commodity Credit Corporation
		HUD: Federal Housing Administration
		Federal National Mortgage Association
		DOD: family housing (loan fund)
		HEW: health facilities guarantee and loan fund
		student loan insurance fund
		HUD: loan funds: low-rent public housing, college housing, housing for the elderly or handicapped, public facilities
		Interior: Bureau of Reclamation (irrigation) loan fund
		VA: direct loan revolving fund, loan guarantee revolving fund
		See General: 1976 Budget of the United States Government, Special Analyses, section E
63,4	Insurance Carriers, Brokers	
		Railroad Retirement Board: (operating expenses)
		Agriculture: Federal Crop Insurance Corporation, Rural Housing Insurance Fund, Agricultural Credit Insurance Fund, Rural Development Insurance Fund
		HEW: Social Security Administration (operating expenses)

TABLE 25:

EXAMPLES OF PRIMARY INDUSTRIES IN THE FEDERAL GOVERNMENT - (Cont'd)

SIC	
	HUD: Federal Insurance Administration Commerce: Maritime Administration war risk insurance revolving fund Labor: Manpower Administration grants to states for unemployment insurance services VA: veterans insurance and indemnities Insurance against foreign expropriation of privately-owned American assets
6531	Real Estate Agents, Brokers, and Managers
	GSA; Public Building Service, Architect of the Capitol Interior: Bureau of Land Management land classification HUD: housing management programs Federal Housing Administration Real property activities and settlement costs DOS: consulate, embassy, and headquarters upkeep VA: management of properties secured by VA mortgages
7311	Advertising Agencies
	Commerce: U.S. Travel Service DOD: Office of Information for the Armed Services GSA: Consumer Information Center Agriculture: Office of the Secretary information services HEW: Office of the Secretary public information Military recruiting
7351,483	News Syndicates and Broadcasting
	United States Information Agency Corporation for Public Broadcasting Board for International Broadcasting DOD: Armed Forces Radio Network HEW: Office of Education educational broadcasting facilities and educational TV programming
7361	Employment Agencies
	Civil Service Commission Selective Service System Equal Employment Opportunity Commission Labor: U.S. Employment Service Manpower Administration grants to states for employment services
737	Data Processing Services
	IRS: data processing services HEW: National Institutes of Health data processing services Office of the Secretary data management services DOD: procurement of computers Allocated data processing personnel Various agency computer centers: Census; Treasury; Commerce; Congress; etc.
7391	Research and Development
	National Science Foundation Agriculture: Agricultural Research Service DOD: Advanced Research Projects Agency, Office of Naval Research NEW: National Institutes of Health (part) Interior: Office of Water (Resources) Commerce: National Bureau of Standards telecommunications research

TABLE 25:

EXAMPLES OF PRIMARY INDUSTRIES IN THE FEDERAL GOVERNMENT - (Cont'd)

SIC

HUD: Office of the Secretary policy development and research
R & D: DOD; NASA; HUD Urban Mass Transit Agency; Energy Research and Development Agency
See generally, National Science Foundation Federal Funds for Research Development, and Other Scientific Activities, Vol. XVIII

7392 Management and Business Consulting Services

Office of Management and Budget
Council of Economic Advisors
Federal Mediation and Conciliation Service
Agriculture: Agricultural Extension Service (part); Soil Conservation Service (part); Farmers Home Administration technical assistance and Rural Renewal Administration; Office of Management Services; Consumer and Marketing Service Trust Fund; Rural Communities Development Service
Commerce: Economic Development Administration (part) Office of Minority Business Enterprise
Justice: Community Relations Service
Labor: Labor-Management Relations Service
Interior: Bureau of Mines resource development
SBA:procurement and management assistance, counseling services
White House Office: executive management improvement

8011 Physicians Offices (51% prorated)

HEW: Public Health Service (parts); Migrant Health Services; Community Health Services; Contract Medical Care; Hospital Support prorated); Center for Disease Control; Alcohol, Drug Abuse, and Mental Health Administration (part); Community Mental Health Center Staffing
/A: medical care
DOD: allocated medical personnel

811 Legal Services

The Judiciary: The Supreme Court; The Courts of Appeals; The District Courts; The Court of Claims; The Court of Customs and Patent Appeals
United States Tax Court
DOD: Courts Martial
National Commission for the Review of Federal and State Laws relating to Wiretapping and Electronic Surveillance
Legal Services Corporation
The Administrative Conference of the United States
Commerce: Patent Office
HEW: Civil Rights Enforcement
Justice: Watergate Special Prosecution Force, general legal activities, expenses of bankruptcy referees
HUD: fair housing and equal opportunity, Office of Interstate Land Sales Registration
Labor: Office of Federal Contract Compliance, Wage and Hour Division investigation and compliance
Library of Congress: Copyright Office
Treasury: Bureau of Customs (part); IRS hearings, rulings, and appeals
Civil Service Commission: appeals
All agencies: General Counsels, Legal Advisors, etc.
All agencies: Drafting, interpreting, and enforcing substantive regulations

TABLE 25:

EXAMPLES OF PRIMARY INDUSTRIES IN THE FEDERAL GOVERNMENT - (Cont'd)

SIC	
82	Education
	DOD: The military academies Mid-Career Schools Industrial College of the Armed Forces, Naval War College, Staff and General Command School; basic and vocational training; training manual production; procurement of trainer aircraft
	HEW: National Institute of Education; Office of Education (including categorical grants) Indian education, education for the handicapped, higher education, occupational, vocational, and adult education
	Interior: Bureau of Indian Affairs (part) education, career development
	Labor: Manpower Administration comprehensive manpower assistance (training programs)
	VA: education and training
8231	Library Service
	Library of Congress
	National Commission on Libraries and Information Science
	Agriculture: National Agricultural Library
	GSA: National Archives and Records Service
	HEW: National Library of Medicine library resources
	Smithsonian Institution: national museum programs
8931	Accounting and Bookkeeping Services
	General Accounting Office
	Cost Accounting Standards Board
	Agriculture: Office of the Inspector General budget, fiscal, and management
	DOD: Defense Contract Audit Agency
	HEW: Office of the Secretary audit agency
	Treasury: Bureau of Accounts; Treasurer of the U.S.; IRS collection, internal audit and security
	HUD: audit
	All agencies: Comptroller and internal program audit

TABLE 26:

EXAMPLES OF SECONDARY INDUSTRIES IN THE FEDERAL GOVERNMENT

Policy Planning

The Legislature

Office of Technology Assessment

Office of Telecommunications Policy

National Capital Planning Commission

Commerce: Office of Telecommunications; Regional Action; Planning Commissions

HUD: urban planning grants

IRS: policy planning

Justice: Law Enforcement Assistance Administration grants for development and and implementation of comprehensive (criminal justice) plans

The President and the White House Office

Council on Environmental Quality

Appalachian Regional Commission

Agriculture: Farmers Home Administration rural water program planning

DOD: The Joint Chiefs of Staff

HEW: urban health planning, health planning and resources development, Office of the Secretary policy research

All agencies: the Secretaries Offices; Deputy and Assistant Secretaries Offices; other executive direction

Market Information Specialists.

Agriculture: Foreign Agricultural Service; Agricultural Marketing Service

DOD: Defense Supply Agency

HEW: National Institutes of Health Service and Supply fund

SBA: supply and procurement aid

Commerce: Business and Defense Services Adminitration promotion of industry and commerce

GSA: surplus property management and disposal (excludes real property transactions)

Interior: Bureau of Mines helium marketing; Bureau of Commercial Fisheries marketing

General Administration: Civilian

All residual administrative offices including items not amenable to detailed breakdown.

General Administration: Military

All military administration not accounted in the primary sector.

TABLE 27:

EXAMPLES OF SPECIALIZED GOVERNMENT INFORMATION SERVICES

Foreign Intelligence Information

Central Intelligence Agency

National Security Agency

National Reconnaissance Office

Defense Intelligence Agency

Military Intelligence Agencies

State: Office of Research and Intelligence

Domestic Intelligence Information

Subversive Activities Control Board

Justice: FBI; Immigration and Naturalization Service; Law Enforcement Assistance Agency data and systems and statistical assistance; Drug Enforcement Agency

DOD: Military Intelligence Personnel (allocated portion)

Treasury: Bureau of Customs; Bureau of Narcotics; Secret Service; IRS: compliance

Regulation of Industry

Federal Reserve System (part)

Civil Aeronautics Board

Consumer Products Safety Commission

Farm Credit Administration

Federal Elections Commission

Federal Home Loan Bank Board

Federal Power Commission

Interstate Commerce Commission

Nuclear Regulatory Commission

Renegotiation Board

Agriculture: Animal and Plant Inspection Service; Commodity Exchange Authority

Justice: Antitrust Division

DOT: Coast Guard marine safety, motor carrier safety

Environmental Protection Agency

Commodities Futures Trading Commission

Equal Employment Opportunity Commission (part)

Federal Communications Commission

Federal Energy Administration

Federal Maritime Commission

Federal Trade Commission

National Credit Union Administration

Securities and Exchange Commission

HEW: Food and Drug Administration

Interior: Mining Enforcement and Safety Administration

Labor: Employment Standards Administration; Occupational Safety and and Health Administration

All agencies: Regulations implementing statutory authority of those agencies. For example, Army Corps of Engineers regulations regarding use of and construction in navigable waters.

TABLE 27:

EXAMPLES OF SPECIALIZED GOVERNMENT INFORMATION SERVICES - (Cont'd)

Statistical and Planning Information

Agriculture: Farmers Cooperative Service (part); Statistical Reporting Service

DOD: Corps of Engineers commercial statistics

Labor: Bureau of Labor Statistics

Commerce: Social and Economic Administration; Bureau of the Census

HEW: Health Resources Administration health statistics

Treasury: IRS statistical reporting

Other agencies conducting major statistical programs:

HEW: Office of Education, Public Health Service; Social Security Administration

Justice: Drug Enforcement Agency; Law Enforcement Assistance Agency

National Science Foundation

HUD

Interior: Bureau of Mines, Fish, and Wildlife Service

Labor: Manpower Administration

Environmental Protection Agency

See generally: Budget of the United States Government, 1976 Special Analyses, Part G

International Information Exchange and Diplomacy

State: most programs, including embassies, consulate services, and international commissions, organizations, and conferences

Arms Control and Disarmament Agency

Agency for International Development (expenses and financial investment incurred in the foreign aid and military assistance programs)

DOD: Office of the Secretary international security affairs

Treasury: Exchange Stabilization Fund

International Trade (Tariff) Commission

National Security Council

The Peace Corps

Foreign Claims Settlement Commission

Agriculture: Foreign Agriculture Service

Commerce: Domestic and International Business Administration (part)

Labor: Bureau of International Labor Affairs

Services Provided Free to Private Industry

National Commission on Productivity and Work Quality

DOD: Corps of Engineers; navigation, flood control, and beach erosion studies

Interior: Bureau of Reclamation general investigations; Geological Survey prospecting, mapping, etc.

Commerce: Domestic and International Business Administration (part) - international sales and activities; National Oceanic and Atmospheric Administration weather and flood forecasts, etc., earth mapping

DOT: Federal Aviation Administration; National Highway Traffic Safety Administration; Coast Guard search and rescue, aids to navigation; Federal Highway Administration program direction and coordination

TABLE 28: SOURCE OF R&D FUNDS IN INPUT-OUTPUT FORMAT[a]

PERFORMER	PURCHASER ($ Millions, 1967) MANUFACTURING	UNIVERSITIES	OTHER NONPROFIT	FEDERAL GOVERNMENT	STATE & LOCAL GOVERNMENT	TOTAL
Commercial R&D Labs	59.3	---	---	1,059.4	---	1,118.7
Manufacturing	7,972.7 (7,918.6)	---	---	7,328.6	---	15,301.3 (7,918.6)
Private Universities	26.7	80.6 (80.6)	66.2	1,214.9	30.3	1,418.7 (80.6)
State & Local Universities	21.3	371.2 (371.2)	52.8	867.1	270.9 (270.9)	1,583.3 (642.1)
Private Hospitals	---	---	---	90.0	---	90.0
State & Local Hospitals	---	---	---	24.4	27.2 (27.2)	51.6 (27.2)
Nonprofit R&D Labs	65.0	---	184.8 (92.4)	471.6	---	421.4 (92.4)
Federal Government	---	---	---	3,395.0 (3,395.0)	---	3,395.0 (3,395.0)
State & Local Government	---	---	---	67.8	70.0 (70.0)	137.8 (70.0)
TOTAL	8,145.0 (7,918.6)	451.8 (451.8)	303.8 (92.4)	14,518.8 (3,395.0)	398.4 (368.1)	23,817.8 (12,225.9)

[a] In-house funding appears within parentheses.

Source: Provided by R. Siebern, BEA Government analyst. Data compiled by M. Rice, Based on National Science Foundation National Patterns of R&D Resources, Table B-1, p. 27 (NSF 69-30). See also NSF Research and Development in Industry and Federal Funds for Research, Development and Other Scientific Activities, (NSF 68-27).

FOOTNOTES

[1] Note that a change made at the 7-digit final demand or value added levels are reflected through every account at a higher level. Also, these changes alter the input-output tables of Chapter 6.

[2] M. Teplin, "U.S. International Transactions in Royalties and Fees: Their Relationship to the Transfer of Technology," *Survey of Current Business*, Vol. 53, No. 12, December 1973.

[3] Certain institutional arrangements for selling pure information raised serious antitrust issues in U.S. v. Westinghouse. In exchange for Westinghouse's designs, blueprints and process rights, the Mitsubishi Corporation agreed to stay out of Westinghouse's U.S. market.

[4] J. Friedlin and L. Lupo, "U.S. Direct Investments Abroad in 1973," *Survey of Current Business*, Part II, August 1974. Additional unpublished data are available from the Bureau of Economic Analysis.

[5] F.W. Dodge Inc., *Annual Awards Statistics*, McGraw-Hill Book Company, New York, annual data.

[6] Federal Communication Commission, *Statistics of Communications Common Carriers*, annual data.

[7] Department of Commerce, "Government Employment."

[8] For Federal government employment statistics, see Civil Service Commission "Occupations of Federal White Collar Workers," (Bureau of Manpower Information Systems) and companion volume on "Blue Collar Workers," annual data. See also, "Pay Structure of the Federal Civil Service," annual data.

[9]Detailed estimates were based on Office of Management and Budget, *The Budget of the U.S. Government*. Also, the *Special Analyses* were used for Federal research and development programs, educational programs, statistical and technical information and the cost of regulation. The *Analyses* were not consistent over time, and our procedures modified them as necessary.

[10]See: National Science Foundation, "National Patterns of R&D Resources," 1953-1975; "Federal Funds for Research, Development and Other Scientific Activities," annual; "Research and Development in Industry," annual; "R&D Activities of Independent Nonprofit Institutions," annual. "An Analysis of Federal R&D Funding by Function," annual.

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This report series defines and measures the "information activity" within the national economy. "Information activity" is defined to include those specific industries and occupations whose primary function is to produce, process or transmit economically valuable information. Changes in the national labor force are analyzed over a 120-year span. Information activities have grown dramatically over the last several decades, until they employed 46% of the labor force in 1970. National Income and Product accounts are analyzed to determine the contribution of the information activities to wages and capital expenditures. Information workers earned 53% of total wages in 1970; 46% of value added was derived from information activities in 1967. Input-Output tables have been constructed which show the detailed structure of the information economy.

Volumes 1 and 2 summarize the findings. Volumes 3, 4, and 5 set forth the Input-Output tables. Volumes 6 through 8 detail the workforce and National Income accounts. Volume 9 describes the database available on computer readable magnetic tape.

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